# INDOOR COMFORT

**MAY 2022** 

THE VOICE OF THE INDUSTRY

www.indoorcomfortnews.com

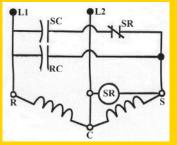
THE WEST'S LEADING MONTHLY NEWSMAGAZINE FOR THE AIR CONDITIONING, HEATING, REFRIGERATION, SHEET METAL AND VENTILATING INDUSTRIES



### **Editorial Focus**

What's new? What's been improved? Find out here as ICN takes a look at the latest offerings in Motors and Drives, Compressors and Controls.

Page 18



# **Troubleshooting**

The equipment in this month's troubleshooting situation is a nine-year-old split system that's "blowing warm air."

Page 26



# **Indoor People**

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

Page 27

## California News

# State Leaders Launch Program Encouraging Construction of All-Electric Affordable Housing

Program to offer \$60 million in incentives to builders who construct energy-efficient housing for low-income Californians.

California state leaders helped kick off a new program from the California Energy Commission (CEC) to support the building of more energy-efficient, low-income housing.

The announcement was made in March at the new, all-electric Vista Ballona development in the Los Angeles Mar Vista neighborhood, which is the type of project the program hopes to encourage. The program offers \$60 million in incentives to builders who construct innovative, energy-efficient and healthier housing for low-income Californians. Applications are being accepted until funds are fully distributed.

"This effort is an important first step towards helping bring



STATE LEADERS AT THE ALL-ELECTRIC VISTA BALLONA DEVELOPMENT IN LOS ANGELES.

healthier new homes to California that don't compromise the lungs of occupants with emissions from gas appliances," said California

Continued on Page 14

# CEC Update

# **CEC Reviews Energy Code Compliance Problems, Seeks Solutions**

Bill introduced to create HVAC equipment and compliance registries.

By Ted Rieger Northern California Correspondent

he California Energy Commission (CEC) held a workshop via Zoom March 22 to examine obstacles to permitting and compliance requirements with the Title 24 Building Energy Efficiency Standards, also known as the California Energy Code, and to consider possible new tools and technologies to improve builder and contractor compliance. The workshop also served as the first public meeting to initiate pre-rulemaking activities for the 2025 Title 24 Energy Code Rulemaking process. In addition to presentations by CEC staff, the workshop included presentations and discussions



BOB WISEMAN, IHACI BOARD MEMBER AND HVAC CONTRACTOR, MAKES A PRESENTATION ABOUT VISUAL SERVICE (VS) TECHNOLOGY AT THE CEC'S RECENT ZOOM WORKSHOP.

from industry representatives on three different panels: designers and energy consultants, local building officials and inspectors, and contractors and installers.

Workshop presenters provided numerous reasons for the lack of permit and code compliance, a particular issue for HVAC equipment replacements in existing homes. These reasons included: added time and costs to homeowners and contractors, time required to get a permit in emergency equipment replacements that could pose safety issues for homeowners, homeowners who request that contractors not get a permit for various reasons, inadequate staffing/knowledge by building officials to enforce code requirements, complexity and lack of understanding of the Energy Code for all parties, and other

**Continued on Page 14** 

# Inside

DEPARTMENTS Industry News 4

**Industry Events 21** 

**Legal Lines 25** 

Classifieds 31

# SAVE THE DATE!

TUESDAY NOVEMBER 15, 2022

42<sup>nd</sup> HVAC/R/SM
IHACI TRADE SHOW
Pasadena Convention Center



ГІТІЕ Воск, АВ

OTS TASA U.S. POSTAGE **GIAQ**  CHANGE SERVICE REQUESTED

454 W. Broadway Glendale, CA 91204

**ІИДООВ СОМЕОВТ ИЕЖS** 



# **GETTING READY FOR THE NEW STANDARDS FOR 2023**

Minimum Efficiencies, Testing Procedures and What They Mean for Contractors



# WHY THE CHANGE

Every six years the Department of Energy (DOE) reanalyzes the effects of energy usage, sets minimum efficiency requirements and manages the testing standards by which those efficiencies are measured. For 2023, the DOE is increasing the minimum efficiencies for central air conditioners and heat pumps.

A NEW NORMAL IS COMING FOR 2023 - SEER2, EER2 AND HSPF2

In 2023, there will be new metrics and nomenclature – SEER2, EER2, and HSPF2. For now, we will continue to use the current terminology – SEER, EER and HSPF – to make ratings comparisons more apparent.

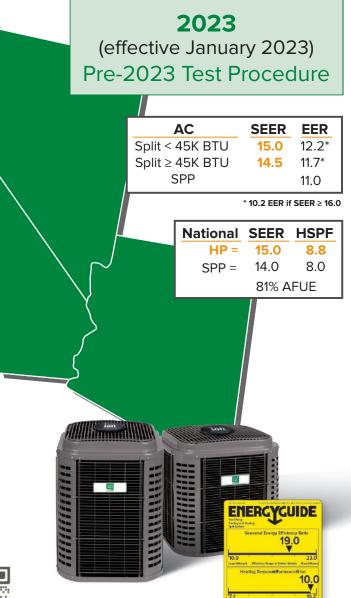
# FERGUSON BRANCH AND TERRITORY MANAGERS CAN HELP WITH:

- Air Conditioners
- Heat Pumps
- Small Packaged Products
- TRAINING

# FOR MORE DETAILS AND TO DOWNLOAD THE BROCHURE, SCAN THE QR CODE OR VISIT:

dandealerresourcecenter.com/2023-doe-regional-standards/





# TO GET IMMEDIATE ASSISTANCE CALL YOUR NEAREST FERGUSON HVAC LOCATION TODAY!

Text your questions or orders to the locations listed below  $\bullet$  Monday – Friday  $\bullet$  7:00 a.m. – 5:00 p.m.

# ARIZONA

**GILBERT** (480) 824-4250 **GLENDALE** (602) 246-6982

MESA (480) 832-3438 NE PHOENIX

(480) 308-8200 **S PHOENIX** (602) 438-8945 W PHOENIX (623) 474-7200 PRESCOTT (928) 759-0222

**NW TUCSON** (520) 670-1100 **SE TUCSON** (520) 290-9851

**YUMA** (928) 329-6420

### CALIFORNIA ANAHEIM

(714) 520-0026 BAKERSFIELD (661) 335-7200

CATHEDRAL CITY (760) 770-6762 CHATSWORTH (818) 341-5200 CHICO

(530) 893-2114

**DUBLIN** (925) 828-4875 **EL CAJON** 

(619) 258-9382

FRESNO (559) 538-6124 GILROY (408) 846-6469

(408) 846-6469 **HAYWARD** (510) 782-9820 INDIO (760) 775-7400 LANCASTER

(661) 945-6902 **MANTECA** (209) 239-6407 **NEWBURY PARK** 

(805) 376-3576 **ONTARIO** (909) 969-2272 **PASO ROBLES** (805) 434-3114

PITTSBURG (925) 778-1237 POMONA

(909) 517-3810 **RIVERSIDE** (951) 784-0506

ROHNERT PARK COMING SOON! N SACRAMENTO (916) 924-8661 S SACRAMENTO

(916) 210-7993 **SAN GABRIEL** (626) 458-2432

**SAN JOSE** (408) 271-1685 **SAN LUIS OBISPO** 

(805) 549-0081

**SAN RAFAEL** (415) 459-3798

SANTA CLARITA (661) 287-3142 VAN NUYS (818) 779-0894

**VICTORVILLE** (760) 241-6284

**NEVADA LAS VEGAS**(702) 260-9388



# Trane® CleanEffects™ Is Now Certified As A Whole Home IAQ Cleaner

Instead of air cleaners in each room, use this entire house application to give homeowners IAQ peace of mind.

### **Trane Clean Effects**

A patented whole-house air filtration system from the recognized industry leader. **Trane CleanEffects** recently underwent new testing to simulate the coronavirus\*, revealing outstanding results.





- Removes 99% of substitute COVID-19 virus particles\*
- Removes particles, mold, allergens and viruses
- Removes particles 700 times smaller than the width of a human hair
- ✓ Entire house application instead of air cleaners in each room
- ✓ No filter replacement ever needed again

Instead of air cleaners in each room, use this entire house application to give homeowners IAQ peace of mind. Watch the video now: https://fast.wistia.net/embed/iframe/9abgxacixc





\*For disclaimer information please visit: https://www.trane.com/residential/en/products/indoor-air-quality/cleaneffects/

Trane received the highest numerical score in the proprietary Lifestory Research 2019 America's Most Trusted® HVAC Brand study for years 2015, 2016, 2017, 2018, 2019,2020 & 2021. Your experiences may vary. Visit www.lifestorvresearch.com

# Get Your IAQ Questions Answered and Ask About Training.

Text your questions to our product experts at the participating locations below.

Monday - Friday, 7:00 a.m. - 5:00 p.m.

### **CALIFORNIA | NEVADA**

(661) 335-7200

CATHEDRAL CITY **ANAHEIM** (714) 520-6440 (760) 770-6762 **AZUSA CHATSWORTH** (626) 969-1874 (818) 341-5200 **BAKERSFIELD** CHICO (530) 893-2114

**CULVER CITY** (310) 391-2291 **EL CAJON** (619) 258-9382 **FRESNO** 

(559) 538-6124

**GILROY** (408) 846-6469 HAYWARD (510) 782-9820 INDIO (760) 775-7400

**LANCASTER** (661) 945-6902 **MANTECA** (209) 239-6446 **NEWBURY PARK** (805) 376-3576

**ONTARIO** (909) 969-2272 **PASO ROBLES** (805) 434-3114

(909) 517-3810 RIVERSIDE (951) 784-0506 PITTSBURG N SACRAMENTO (925) 778-1237 (916) 924-8661

**POMONA** 

**S SACRAMENTO** (916) 210-7993 **SAN JOSE** (408) 271-1685 LAS VEGAS, NV (702) 260-9388



# CALIFORNIA



# **Housecall Pro** Awards \$50K in **Scholarships**

San Diego, Calif. – Housecall Pro, the software platform trusted by over 24,000 home service companies to run their business, recently awarded 20 HVAC students \$50,000 in scholarships through its Trade Academy program.

Trade Academy, launched in 2021, is a free resource that hosts industry-specific job boards. Home service businesses can create employer profiles, post open job listings, and search resumes of qualified candidates in their area. The platform, created by Housecall Pro as part of its mission to champion Pros to success, is fully committed to delivering value to trade school students, job seekers, and home service business owners.

"One of our key goals for Trade Academy is to encourage more young people to consider careers in the trades," says Roland Ligtenberg, Co-Founder at Housecall Pro. "Students are often told that going to college for a four-year degree is the only path to success and wealth - but we see in our data that it's

not true. So we created the Trade Academy scholarship fund to inspire the next generation of Pros to start a fulfilling, lucrative career in the trades."

Trade Academy's Next Generation Scholarship program, presented in partnership with WD-40 Brand and Truewerk, accepted hundreds of applications from trade schools and organizations across the United States. In January, 20 recipients were selected to be awarded \$2,500 each for tuition and tools – plus a year's supply of WD-40 Brand products, a Truewerk workwear system, and a year-long Housecall Pro 'Essentials' subscription.

The skilled trades are the backbone of the American economy. Housecall Pro's Trade Academy program is doing its part to reverse the labor shortage and empower the next generation of technicians and business owners.

See the full list of Next Generation Scholarship winners at www. tradeacademy.com/blog. Visit www. tradeacademy.com to set up a free employer or job seeker profile today.

Housecall Pro is a top-rated, all-inone business solution, helping over 24,000 home service companies work simpler and grow smarter. With easyto-use tools for scheduling, dispatching, payments, automating marketing, and more, Housecall Pro helps Pros efficiently manage every aspect of their business all in one place. The Housecall Pro platform is available through a mobile app and web portal for Pros across the United States and Canada. Founded in 2013, Housecall Pro has been championing Pros through streamlined solutions and strong community support for over eight years.

# **Bonney Celebrates Female Employees**

Sacramento, Calif. - Bonney Plumbing, Electrical, Heating and Air (Bonney), a home services company headquartered in Rancho Cordova, Calif., is celebrating its female employees and breaking down misconceptions about women in the trades. From executive positions to technicians and trainers. Bonney's team is diverse and supportive for tradespeople of all genders.

Though careers in the industry are still often considered "for men," women have a long history in the trades dating back centuries, but coming into prominence in the modern era in World War I. When men went off to war, women produced heavy machinery, entered the electrical field and took jobs in welding, riveting and assembling and connecting motors.

From its very beginning, Bonney was established by Mark and Candace Bonney. Candace played a pivotal role in creating the foundation for the company's culture. Today, 19-percent of the Bonney team are women, including the vice president of marketing and director of human resources. By comparison, nationally only 3- to 4-percent of the building trades workforce

'We support all of our employees regardless of gender and we strive to create an environment that is not only welcoming to women but sets them up for success," said Jeremy Macdonald, Chief Executive Officer of Bonney. "Through both our training programs and our diverse management team, Bonney provides resources to help position our employees for growth. Our focus on training and career development sets our employees up for success in their career and builds an incredible team to serve our customers.

One of those resources is BonneyU, a program the company launched last year to prepare employees for success in the industry. BonneyU trains the next generation of technicians and provides the opportunity to be hired after completion of the program. BonneyU's 10-week training program gives students more than 400 hours

of hands-on experience.

Today's tradeswomen are helping redefine what a viable career looks like for a woman in 2022, though there still are challenges.

"Once I went to a call and a male customer asked me if I was selling cookies," said Moana Schietinger, Bonney's HVAC Sales Manager. "No, I'm here to check your HVAC system, tell you how to fix it and how much it will cost. As a female, you have to stand strong in what you know. Female techs aren't the norm, but we're going to change the world."

"As a minority and a female, there are a lot of boundaries that people will set for you and sometimes we don't get the credit we deserve." said Sequoia Dunkinsell, an electrical trainee. "Women can do hard tasks, can keep up with the guys and still be feminine. We can do anything. I'm living proof."

The Bureau of Labor Statistics projects that from 2020 to 2022 the demand for electricians will grow 9-percent and 5-percent for plumbers and HVAC technicians. For more information about job opportunities with Bonney, visit www.Bonney.com.

# **IHACI IHACI MEMBERS** MAY NOW TAKE ADVANTAGE OF **TOOL DISCOUNTS THROUGH** TRUTECH TOOLS BY VISITING THEIR SITE: **WWW.TRUTECHTOOLS.COM** TYPE IN THE IHACI DISCOUNT CODE **PUBLISHED IN THE APRIL NEWSBRIEFS, OR CALL IHACI AT** (818) 551-1555.

# TEXAS

# **Goodman to Buy** CCOM Group, Inc.

Waller, Texas – Goodman Distribution, Inc., a subsidiary of Daikin, has entered into a definitive agreement to acquire CCOM Group, Inc. (OTC Pink: "CCOM", "CCOMP") and its wholly owned subsidiaries for \$2.71 per share of common stock and convertible preferred stock, the companies jointly announced. Goodman Distribution, Inc. will change its name to Daikin Comfort Technologies Distribution, Inc.

CCOM's subsidiaries, Universal Supply Group, Inc., RAL Supply Group, Inc., and S&A Supply, Inc., have shaped it into a leading full line distributor of HVAC products, building management systems, plumbing and electrical supplies, and parts and accessories in the Northeastern United States. The transaction is expected to close in the first half of the year, subject

# 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!

Email your response to: advertising@indoorcomfortnews.com

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

to customary closing conditions.

"I am incredibly excited to have CCOM and its companies join us on our journey to becoming North America's clear leader in indoor comfort solutions," said Takayuki "Taka" Inoue, Daikin Executive Vice President and Chief Sales and Marketing Officer.

"The acquisition of CCOM supports our strategy of continued commitment and growth in the region and is integral to our distribution expansion efforts in the Northeast," said Ardee Toppe, Daikin Senior Vice President.

The announcement follows Daikin's acquisition of Pacific Northwestern companies Thermal Supply, Inc. and AirReps, LLC in December, and other recent acquisitions including ABCO HVACR Supply + Solutions, Robinson Plumbing & Heating Supply, Co., Inc., Thermal Mechanics Inc. (TMI), and Stevens Equipment Supply.

"Combining our unique strengths as a multi-branded Technical Supply House with the largest HVAC manufacturer in the world is clearly the best way for us to deliver on our aggressive growth plans," said Pete Gasiewicz, CCOM CEO. "This alignment solidifies our longstanding relationship and gives us the best opportunity to serve our contractors in a very competitive region."

CCOM will continue to supply and promote the full line of residential unitary Goodman and Amana® brand equipment and Daikin ductless and light commercial HVAC products, as well as a diverse lineup of additional brands and products. This includes building management systems and controls, other HVAC, indoor air quality, hydronic, plumbing and electrical equipment and supplies throughout its 15 locations across New Jersey, New York and Massachusetts.

Following the closing of the transaction, CCOM and its subsidiaries will operate as a wholly owned business unit of Goodman, while maintaining headquarters in Hawthorne, New Jersey with more than 165 employees.

Daikin Industries, Ltd. (DIL) is a Fortune 1,000 company with more than 84,870 employees worldwide and is the world's #1 indoor comfort solutions provider company. Daikin Comfort Technologies North America (DNA), Inc is a subsidiary of DIL, providing

Daikin, Goodman, Amana® and Quietflex brands 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 Technology Park near Houston, Texas. For additional information, visit https://www.northamerica-daikin.com/.

# RectorSeal and TRUaire Celebrate Continuation of Scholarship Program

. . . . . . . . .

**Houston, Texas** – RectorSeal, a leading manufacturer of quality

HVAC/R and plumbing tools and accessories, and a wholly owned subsidiary of CSW Industrials, Inc., recently recognized scholarship recipients in Vietnam in the continuation of a program originated by TRUaire.

TRUaire, which has a manufacturing facility in Ho Chi Minh City and was acquired by RectorSeal in December 2020, launched the University of Economics and Law Ho Chi Minh Scholarship program in 2019. RectorSeal President Don Sullivan said the program celebrates students' achievements and will continue because it aligns with CSWI's core values and RectorSeal's sense of corporate citizenship.

"Being members of a community that strives for excellence helps drive us forward as a business, and this program embodies these values," he said. "Helping tomorrow's leaders succeed today is important to CSWI and RectorSeal."

The scholarship program has helped more than 80 students achieve their educational goals over the past three years, most of whom attended February's scholarship ceremony for this academic year's recipients which was held at TRUaire's manufacturing facility in Ho Chi Minh City. In addition to these scholarships, TRUaire offers a program for dependents of employees that is similar to the CSWI Scholarship Program in the U.S.

"A successful education equips you with skills to help you resolve complex challenges," Mr. Sullivan told students. "The lessons you learn over the next few years will last a lifetime."

# Smart Air Service Company Rebrands as Smart Air Cooling and Heating

Austin, Texas – Smart Air Cooling & Heating, a family-owned and operated HVAC company serving the Austin area since 2009, announced it has completed a major rebranding to better reflect the company's commitment to advancements in the home services industry.

"While we are still dedicated to providing the same localized and professional service that we have become known for, we feel the new company name, logo, website,

Continued on Page 6



**Mesa** 480.844.1140

**Tucson** 520.323.8783 www.olimpiasplendidusa.com

sales@olimpiasplendidusa.com

### Continued from Page 5

uniforms, and truck wraps better conveys to the public the type of service we furnish," said Shane Bryant, president of Smart Air Cooling & Heating. "We are still a family-owned and operated business, but we are also a forward-thinking company that provides our customers with the latest heating and air conditioning solutions. We are highly accountable for the results of our work product."

When Bryant started the company, he was still working as a technician for a major HVAC manufacturer but was making repairs for a handful of clients as a side job. Once his clientele grew larger, he left his full-time job and devoted his time to his fledgling business, known then as Smart Air Service Company. Now, the company that started as Bryant's part-time job has grown to employ 14 office workers and technicians.

"We still have many of the customers we started with," Bryant said. "We wanted our brand to reflect our growth while still paying homage to the customers who started this journey with us."

Office Manager Jeff Jones said Smart Air has always been forward thinking in its approach and that is not limited to its services. In December, Smart Air hired Lisa Pena



to head its installation team. Pena, who has worked as an HVAC service technician and manager for more than 20 years, is one of only a handful of female installation managers in the industry.

"Shane has always looked to the future and spends a great deal of his time to make sure we stay on the cutting edge of the latest technologies in heating and air conditioning products and services," Jones said. "We are confident the new branding will show our customers we are devoted to providing them with the most modern product and services available in this industry."

# **Duravent Acquires Hart & Cooley**

**Detroit, Mich.** – DuraVent acquires Hart & Cooley, bringing together two industry leaders in the building products marketplace.

Both companies have a long history in the hearth and HVAC industries with legacy brands and innovative products. "Our immediate objective is to build one unified company, with one team, focused on world-class manufacturing and distribution," said DuraVent President and CEO Simon Davis in announcing the deal.

"We are guided by our passion for innovation and commitment to creating the benchmark for responsive customer service."

Together, DuraVent and Hart & Cooley products will ensure the highest standards of HVAC products in the marketplace enhancing quality of life for customers.

DuraVent also owns Security Chimneys in Montreal, Canada. Hart & Cooley is a leader in HVAC, manufacturing and distributing a portfolio of some of the most recognized and trusted brands in the industry, including Selkirk, AMPCO, AmeriVent, Heatfab and MILCOR. The transaction is supported by the Egeria Group through its Evergreen fund.

Headquartered in Detroit, DuraVent® is a recognized technological leader in the venting industry. Consistently first-to-market with new innovations in venting systems, DuraVent has captured its leadership position with best-in-class design and manufacturing capabilities, world-class distribution networks, and customer-first service and support.

Scientifically proven materials and unequaled engineering make DuraVent products not only the best and safest choice, but the only choice

for professional quality venting solutions. DuraVent is committed to continuing this trend by providing the industry with cutting-edge products and refinements to existing products that not only meet the demands of today's market but go beyond it.

For more information about DuraVent, visit the company's website at www.duravent.com or www.duraventfiltration.com.

# Air Pros USA Ranks No. 4 on Fastest-Growing List

Davie, Fla. – Air Pros USA, a leading air conditioning and heating company based in Florida, was ranked No. 4 on Inc. Magazine's third annual Inc. 5000 Regionals: Southeast list, the most prestigious ranking of the fastest-growing private companies based in Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, Puerto Rico, South Carolina, and Tennessee. Born of the annual Inc. 5000 franchise, this regional list represents a unique look at the most successful companies within the Southeast region economy's most dynamic segment-its independent small businesses.

Air Pros USA was listed as one

of the highest-ranking HVAC service businesses in the Southeast region.

"I tell our team we're not in the HVAC business, we're in the people business. We are so thankful for our customers who continually welcome us into their homes and have supported our meteoric rise as one the leading HVAC companies in the area," said Anthony Perera, Founder and CEO of Air Pros USA. "Our momentum will continue into 2022 as our company is already on track to break the records that we achieved last year. We are humbled that our successes have been recognized by Inc. and are proud of achieving a high ranking for the second year in a row."

Perera founded the residential and commercial air conditioning services company in 2017 in Fort Lauderdale, Florida with a single truck and two employees. In less than five years, Perera has expanded Air Pro USA to serve over half a million customers in over a dozen service locations across the United States and more than doubled their previous year's revenue from \$40 million to just under \$100 in 2021. Recently, Air Pros USA entered its 7th state with the acquisition of a home service company in Louisiana.

Air Pros USA ranked within the top 1000 on the 2021 Inc. 5000 list. The company was also awarded as the fastest growing company in South Florida by the South Florida Business Journal after achieving a 1,803% in growth over the course of two years from 2018 to 2020.

"This year's Inc. 5000 Regional winners represent one of the most exceptional and exciting lists of America's off-the-charts growth companies. They're disruptors and job creators, and all delivered an outsized impact on the economy. Remember their names and follow their lead. These are the companies you'll be hearing about for years to come," said Scott Omelianuk, editor-inchief of Inc.

Complete results of the Inc. Regionals, including company profiles and an interactive database that can be sorted by industry, region, and other criteria, can be found at https://events.inc.com/inc-regionals.

Air Pros USA was founded in South Florida in 2017 on the promise of integrity, reliability,

CONTRACTING DOESN'T NEED TO BE THIS HARD.

Get the answers at SERVICE ROUNDTABLE

ServiceRoundtable.com 877.262.3341

Continued on Page 8



Offer customers generous rebates on high efficiency equipment and installations.

# Rebates include:

- Up to \$4500 rebate on ENERGY STAR® certified solar thermal water heater with gas back-up.
- Up to \$1000 rebate on ENERGY STAR® certified natural gas furnaces.
- Up to \$1000 on qualifying ENERGY STAR® certified natural gas tankless water heaters.
- Up to \$115 rebate on ENERGY STAR® certified natural gas storage water heaters.



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





### **Continued from Page 6**

and putting our customers first. The company has quickly expanded to many metro areas within Florida, Alabama, Mississippi, Colorado, Georgia, Texas, and Washington, with more locations expected to be introduced soon. Air Pros USA currently employs more than 450 experienced professionals in more than a dozen metro Service locations including Miami, Orlando, Dallas, Atlanta, Colorado Springs, Mobile and Spokane. For more information visit www. airprosusa.com.

# American Residential Services Buys ESCO

. . . . . . . . .

Memphis, Tenn. – American Residential Services (ARS/Rescue Rooter), a provider of residential heating, ventilation, air conditioning (HVAC), and plumbing services, announced it has acquired ESCO Heating, Air Conditioning, Plumbing, and Electric in Salt Lake City, Utah. ESCO Heating, Air Conditioning, Plumbing, and Electric has been serving residential customers in the greater Salt Lake City and Park City areas since 1977.

"As Mark Baker and I were looking into the future for our company, finding the right partner was extremely important to us," said Brian Templin, ESCO president. "ARS/Rescue Rooter, as the largest operator of HVAC and plumbing businesses in the country, has a proven track record of acquiring and integrating companies like ours and offers us access to many centers of excellence in areas such as recruitment, marketing, and

operations. Keeping the local culture and brand while allowing our teams to be part of a national organization providing opportunities for advancement across the United States seems like the best of both worlds to us."

"Acquiring ESCO Heating, Air Conditioning, Plumbing and Electrical is consistent with our strategic vision for continued growth in the West," said Scott Boose, CEO, ARS/Rescue Rooter. "I'm pleased to have the team join the ARS network. Their dedication to customers along with years of experience in the industry will be a successful partnership for our company."

# EPA Cracks Down on Illegal HFC Shipments

. . . . . . . . .

Washington, D.C. - At its inaugural meeting, the Interagency Task Force on Illegal Hydrofluorocarbon (HFC) Trade announced that over a period of 10 weeks, it has prevented illegal HFC shipments equivalent to approximately 530,000 metric tons of CO2 emissions, the same amount as the emissions from nearly 100,000 homes' electricity use in one year. As of January 1, 2022, when the United States Environmental Protection Agency (EPA)'s HFC Allowance Allocation and Trading program went into effect, the import of HFCs requires allowances. Shipments coming to U.S. ports without proper allowances have been identified, stopped, and re-exported.

In September of 2021, the task force was established when EPA issued a final rule initiating a com-

prehensive program to cap and phase down the production and consumption of climate-damaging HFCs in the United States, potent greenhouse gases commonly used in refrigeration and air conditioning equipment. A global phasedown of HFCs is expected to avoid up to 0.5 °C of global warming by 2100. The HFC phasedown is projected to avoid approximately 4.6 billion metric tons of CO2 from 2022–2050 in the United States, or nearly equal to three years' worth of U.S. power sector emissions at 2019 levels. The task force helps ensure the vast environmental benefits of the rule are realized by detecting, deterring, and disrupting any attempts to illegally import HFCs into the United States.

"Our task force is already sending the clear message to potential violators that we are fortifying our borders against illegal imports. It's simple – no allowances, no entry," said Joe Goffman, principal deputy assistant administrator for the Office of Air and Radiation. "Strict enforcement of our HFC allowance program ensures that U.S. efforts to phase down these climate-damaging chemicals are successful."

"EPA will continue to work in close collaboration with its federal partners to implement a multipronged enforcement strategy that includes pursuing civil and criminal violations of the law," said Lawrence Starfield, acting assistant administrator of the Office of Enforcement and Compliance Assurance.

"We are proud of the collaborative work that we have been doing to identify suspicious shipments, investigate them, and punish violators," said Gail Kan, acting executive director of trade policy and programs, Office of Trade, U.S. Customs and Border Protection. "These include shipments that violate laws protecting our environment. The United States is closed to illegal trade – in this case trade that harms our climate. We will continue to ramp up our efforts, so potential violators should beware."

Violating the AIM Act can result in administrative and civil fines as well as injunctive relief and other consequences including the revocation of allowances. In addition, illegally imported HFCs may be seized by authorities, or the importer required to re-export or destroy the goods, at their cost. Knowing violations of the AIM Act and related smuggling crimes may result in criminal fines, imprisonment, and other penalties as appropriate.

The task force is co-chaired by EPA and the Department of Homeland Security, and includes Customs and Border Protection, Department of Defense, Department of Justice, and Department of State. In addition to stopping illegal imports at the border, the task force also announced that EPA has issued 14 Notices of Violation to companies that have allegedly failed to comply with HFC reporting obligations under the Greenhouse Gas Reporting Program (GHGRP). These companies are HFC importers who received HFC allowances after reporting late. Enforcement of the GHGRP is a necessary component of upholding the HFC Allowance Allocation and Trading Program and the task force's deterrence work. It is also an important part of EPA's broader climate regulatory and enforcement work.

# NADCA Recognizes 2021 Safety Award HVAC Winners

Mt. Laurel, N.J. – NADCA recently announced the recipients of its 2021 Safety Awards. As the world's most respected authority on the inspection and cleaning of heating, ventilation, and air conditioning (HVAC) systems, NADCA presents its Safety Awards to contractors who have shown a verifiable commitment to employee, customer, and community safety throughout the year. The awards were announced on March 21 at the association's 33rd Annual Meeting & Exposition in Aurora, Colo.

Companies recognized with NADCA's 2021 Outstanding Safety Award:

- AFTERDISASTER
- Air Management Industries Incorporated
  - Chemiclene, Inc.
  - Coit Services of Modesto
  - Core Mechanical, Inc.
- Cross Environmental Services, Inc. (CES)
- Delta Industrial Services, Inc.
- Doc's Super Vac, Inc.
- Duct & Vent Cleaning of America, Inc.
  - Ductworks, Inc.
- Ductz of Greater Portland & Vancouver
- Guardian Services
- Hughes Environmental, Inc.
- K-tech Kleening Systems, Inc.
- Power Vac America, Inc.
- Providet Service Associates, Inc.
- RHP Mechanical Systems, Inc.
- Sani-Vac Service, Inc.
- SMS Indoor Environmental Cleaning, Inc.
- Flagship Environmental Services Corp.
- EMS Ice, Inc.

Companies recognized with NADCA's 2021 Safety Award:

- Clean Air Systems of LA, Inc.
- CORE California
- CORE Virginia
- Duct Clean Corporation

- Duct Doctor USA
- Dusty Ducts, Inc.
- Hoover's Air Duct Cleaning, Inc.
- Kleen Air Service Corporaion
- Professional Abatement & Remediation Technologies
  - Superior Air Duct Cleaning
  - Ventilation Power Cleaning

"NADCA members are not only committed to adhering to the highest standards in HVAC system cleaning; safety is a top priority as well," said NADCA Chief Executive Officer, Jodi Araujo, CEM. "The Safety Awards recognize those companies that have gone above and beyond this commitment, ensuring safety for their employees and customers."

The criteria for NADCA's Safety Awards are based on regulations and recommendations from the U.S. Occupational Safety & Health Administration (OSHA). The awards are presented annually. Recipients of the Outstanding Safety Award are companies who have been recognized with the NADCA Safety Award for at least three consecutive years.

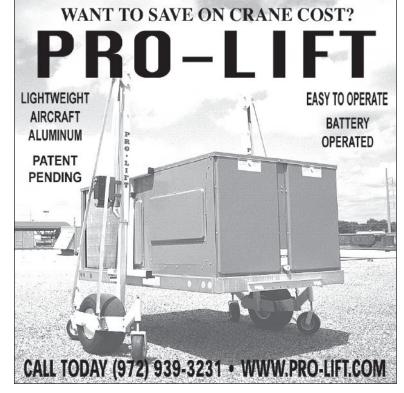
The HVAC Inspection, Cleaning and Restoration Association was formed in 1989 as a non-profit association of companies engaged in the cleaning of HVAC systems. NADCA's mission is to represent qualified companies engaged in the inspection, cleaning and restoration of HVAC systems, promote source removal as the only acceptable method of cleaning, establish industry standards for the association, and assist NADCA members in providing high quality service to their customers. With more than 1,400 members, NADCA is made up of a diverse group of HVAC industry professionals, including air systems cleaning specialists, mold remediators, and HVAC inspectors. To learn more about NADCA, visit www.nadca.com.

# Spraggins Buys One Stop Cooling and Heating

. . . . . . . . .

Orlando, Fla. – Spraggins Inc. announced that it has acquired One Stop Cooling and Heating. Operating out of five branch locations in Central and North Florida and utilizing a fleet of 200 installation and service trucks, One Stop

Continued on Page 10



8 ICN MAY 2022 www.indoorcomfortnews.com

# The York HMH7 Horizontal Discharge Heat Pump:

2-5 Ton • Standard 24 Volt Controls • Works With **Conventional Air Handling Units and Evaporator Coils** 

Price Competitive With Standard Heat Pumps

direct to contractor rebate from California utilities using the California TECH **Clean Program!** 



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

The YORK® HMH7 Heat Pump is designed to provide all the comfort and technology of a high efficiency unit at the cost of a base-tier vertical unit for residential customers. It's an ideal solution for homes that require a compact design and comes in several models and tonnages with flexible installation options and innovative features.



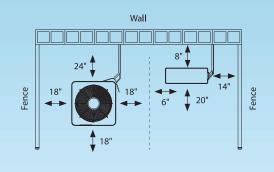
Model	Tons	SEER	HSPF	Height (Inches)	Width (Inches)	Depth (Inches)	Operating Weight (Lbs)	Sound Range (dBA) Low–High*
HMH72B241S	2	17.5	9.0	26 3/8	33 7/8	12 1/4	112	54–65
HMH72B361S	3	18.0	10.5	33	37 3/8	13 3/8	155	56–68
HMH72B481S	4	18.0	9.5	54 5/8	37 3/8	13 3/8	227	62–69
HMH72B601S	5	17.0	10.0	54 5/8	37 3/8	13 3/8	251	62–73

\*High sound rated in accordance with AHRI Standard 270.

## 40% smaller footprint compared to traditional vertical discharge units



### Traditional, Vertical Unit Minimum Clearances vs. HMH7 Minimum Clearances



HMH7 Horizontal Discharge **Heat Pumps** 















# SAMSUNG







### INSTALL CONFIDENCE HVAC. Built brave. www.us-ac.com • 🔞 🖾 💆 800/937-7222

ARIZONA Avondale 602/572-2953 Deer Valley 623/580-4101 Fort Mohave 928/768-2197 480/813-4628

Peoria 623/334-8302 Phoenix 602/253-2771 Tucson 520/903-3117

CALIFORNIA naneim 14/776-3170 Burbank 818/840-0089 Cathedral City 760/770-4520

Chatsworth 818/678-1750 City of Industry 626/854-6868 Concord 925/349-3712 Culver City 310/204-2230

El Cajon 619/258-0672 El Centro 760/370-5530 Escondido 760/291-1281 Fairfield 707/424-6050

Fresno 559/268-9347 Hesperia 760/948-8045 Lake Forest 949/837-8104 Lancaster 661/726-5106

Los Angeles 323/897-6969 Modesto 209/577-2335 Newbury Park 805/376-1723 North Highlands 916/482-3572

Ontario 909/987-5016 Oxnard 805/988-3650 Palm Desert 760/200-5225 Paso Robles 805/238-9353

Redding 530/722-0144 Riverside 951/786-3500 San Bernardino

909/885-3206

San Diego 858/279-9750 San Jose 408/278-1555 Santa Barbara

Stockton 209/466-4153

Santa Fe Springs 562/801-5432 Temecula 951/296-6557 Signal Hill 562/981-2010 Van Nuys 818/464-3387 IDAHO NEVADA Sparks 775/329*-*3455 208/672-1244 or 800/727-9936

UTAH Salt Lake City 801/485-8071 or 800/333-8436

# Johnson Controls Prepares Channel Partners for DOE 2023 Efficiency Regulations

Largest energy-saving policy measure in U.S. history to go into effect Jan. 1, 2023.

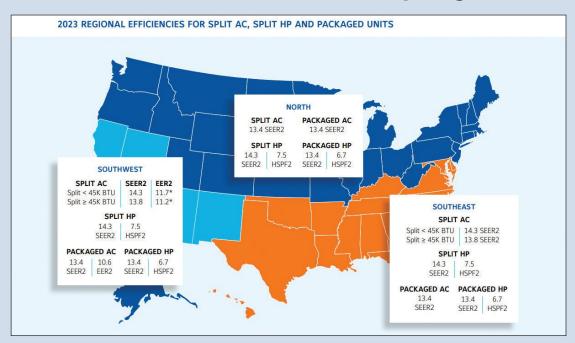
Milwaukee, Wisc. - Johnson Controls, the global leader for smart, healthy and sustainable buildings is preparing distributors and contractors for the new U.S. Department of Energy's (DOE) appliance standards for residential and commercial equipment, which take effect January 1, 2023. The standards set new minimum heating and cooling efficiency requirements for residential and commercial central air conditioners and heat pumps, as well as commercial gas furnaces. Additionally, new test procedures will also take effect, impacting how systems are tested and rated. These changes are part of the Department's ongoing efforts to reduce the United States' energy consumption and greenhouse gas emissions. Combined with the first phase of efficiency upgrades which took effect in 2018, it's considered the largest energysaving policy initiative in U.S. history.

To meet the requirements and help customers reduce energy use, Johnson Controls is committed to helping its distributors, contractors and partners address the challenges these new regulations bring to make the transition as smooth as possible. Johnson Controls is offering indepth resources, ongoing webinars and in-person training on the DOE 2023 efficiency transition.

Training for the DOE 2023 regulations focuses on the following key areas:

- New minimum product efficiency levels
- New testing and measurement changes (ex: SEER vs SEER2)
- Residential vs commercial regulations
- Differing regional regulations for residential AC equipment (North, Southeast, Southwest)
- Inventory sell-through differences between "date of installation" versus "date of manufacturing" to avoid stranded inventory
- Understanding residential system matches (old to new) when creating a solid "phase-in, phaseout" strategy
- DOE enforcement and how to avoid noncompliance

"These new regulations, which go into effect on January 1, 2023, create intricate compliance requirements for contractors and distributors of HVAC equipment," said Chris Forth, vice president of regulatory, codes & environmental affairs, Ducted Systems, Johnson



Controls. "It's absolutely imperative that contractors and distributors alike thoroughly understand how this will impact the industry and their business, and how to properly prepare before these new regulations go into effect. As a leader in HVAC, we're continuing to take significant steps to serve as a resource to our channel partners to help ensure a smooth transition."

Johnson Controls has made several investments in recent years to improve product quality and launch new products to meet and exceed these energy efficiency regulations. Within the last three years, Johnson Controls significantly expanded both its Wichita, Kansas, testing laboratory and Rooftop Center for Excellence in Norman, Oklahoma. The Norman facility now features nearly 400,000-square-feet of incremental laboratory and manufacturing space - including a two-story, 52-foot-high testing lab roughly the size of one-and-a-half football fields - and the Wichita testing facility now features 100,000 square feet of laboratory space and advanced equipment. These extensive upgrades have enabled Johnson Controls to efficiently

execute the new mandatory compliance testing while also improving the efficiency, safety, serviceability and reliability of its Ducted Systems products for the following brands: Johnson Controls, YORK®, Luxaire®, Coleman® Heating and Air Conditioning, Champion®, Fraser-Johnston®, TempMaster®, Evcon™ and Guardian®.

To learn more about DOE 2023 energy efficiency regulations and view collateral created to support channel partners, visit www.johnsoncontrols. com/doe.

### Continued from Page 8

is a residential HVAC company located in Florida.

"Acquiring One Stop allows us to continue executing on our strategy of diversifying our service offering as well as expanding our geographic footprint," said Michael Spraggins, CEO of Spraggins Inc. "We are excited to enter the mechanical trades and will be maintaining the One Stop brand going forward."

Spraggins Inc. has been serving the construction industry as a distributor and contractor since 1980.

# Winsupply Acquires Williams Wholesale

**Dayton, Ohio** – Winsupply Inc., one of the largest distributors in the nation, has completed the purchase of all three Williams Wholesale Supply locations.

"Williams Wholesale is a thriving plumbing and electrical wholesale distributor serving the Cookeville, Crossville, and McMinnville, Tennessee markets. Winsupply is excited to extend our growth trajectory in the western region of Tennessee and welcome Williams' dedicated team to the Winsupply organization. The Williams Family has been serving this area for more than 80 years. Partnering with a company that focuses on customer service is exactly what Winsupply was looking for," says Greg Holbrock, vice president of M&A due diligence and financial integration.

The locations will continue to do business as Williams Wholesale, A Winsupply Company.

Winsupply Inc. (www.winsupplyinc.com) is a leading supplier of residential and commercial construction and industrial supplies and equipment headquartered in Dayton, Ohio. Known as "The Winsupply Family of Companies," the privately held company has collective sales of \$5.5 billion among 630 wholesaling locations in 45 states. Winsupply offers entrepreneurs the unique opportunity to own a meaningful part of the

local business. Companies include Win-branded locations, Noland Company, Carr Supply, Security Plumbing & Heating Supply, Wyatt Irrigation, Electrical Sales, Inc., Tacoma Electric and APCO. Winsupply's companies conduct business-to-business distribution of plumbing, industrial pipe, valves and fittings, HVAC, electrical, waterworks and other supplies.

# ACCA Names Residential Contractor of Year

• • • • • • • •

Alexandria, Va. – The Air Conditioning Contractors of America (ACCA) announced Doctor Cool & Professor Heat of League City, Texas as the ACCA 2022 Residential Contractor of the Year, sponsored by Honeywell.

Each year, ACCA's Residential Contractor of the Year award is presented to a contracting company that demonstrated an extraordinary commitment to contractor excellence. Finalists are judged on a range of qualities including community involvement, industry involvement, and a commitment to training and certifications. A panel of ACCA past chairmen judge the finalists and select the ACCA Residential Contractor of the Year winner. The 2022 judges were: Phil London, Thermal Concepts, Inc., Davie, Florida; Tony Shaker, Enfinity Partners LLC, Mashpee, Massachusetts; Steve Lauten, Total Air & Heat Co., Plano, Texas; and Stan Johnson, retired.

"ACCA applauds Doctor Cool & Professor Heat for their proven greatness in HVACR," said Barton James, ACCA president and CEO. "With over 40 years serving the industry, customers can trust Doctor Cool & Professor Heat to take care of all their HVACR needs. This is a well-deserved recognition, and we look forward to seeing their future accomplishments."

James Barry, Doctor Cool & Professor Heat president, received the Residential Contractor of the Year award at the 2022 ACCA Annual Conference & Expo, March 28-30 in St. Louis, Missouri.

"We are honored to be chosen as ACCA's 2022 Residential Contractor of the Year," said Barry. "In 1979, Doctor Cool & Professor Heat was started on the foundation that 'there is no right way to do the wrong thing.' In addition to our company's core values, the resources provided by ACCA, including MIX Groups and business training classes, have helped us earn this level of prestigious recognition since becoming a member in the early 1980s."

# Heartland Home Services Acquires Delio HVAC

**Grand Rapids, Mich.** – Heartland Home Services, an HVAC, plumbing, and electrical home services company, announced that it has acquired Deljo Heating and Cool-

Continued on Page 12

# SERVING THE WEST'S HVAC NEEDS SINCE 1967



All Dial® Mini-Split Systems are AHRI Listed, ETL Certified and are backed by a 7 years compressor / 2 years parts warranty.

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

AZ - Southern AZ Ron Schelle 520-909-0361 MT, WY, ID, CO, UT, NE, SD Kirk Jensen 801-458-6331

**CA, NV, OR, WA, HI** Jim Deto 510-387-2723 NM, TX - El Paso Ray Portugal 915-276-1139

All Other Locations
Jim Henderson
602-799-1703



www.dialmfg.com/ms
INVENTORY LOCATED IN PHOENIX, AZ

### Continued from Page 10

ing, a provider of HVAC services in the Chicagoland area for the past 100 years. The addition of Deljo significantly strengthens Heartland's presence in Illinois and bolsters the company's service offerings in Chicago's North Shore market.

Deljo specializes in residential HVAC services, solutions, and products from technicians. The company offers 24-hour services, same-day repairs, and an upfront pricing guarantee. Utilizing the "Shared Strength" resources of the acquisition, Deljo will have access to Heartland's technology suite, which will help accelerate growth

in months and years to come.

"We are excited to partner with Heartland and help expand its presence as a premier technology-enabled HVAC, plumbing, and electrical home services provider," said Bill Clement, president of Deljo. "As we benefit from mutual long histories in the field, this partnership will bring company growth and advancement opportunities for our employees, while also allowing us to continue providing best-in-class service to our customers throughout the North Shore of Chicago."

"The Deljo team and leadership give us a solid platform to expand in the Illinois market. We welcome them to the Heartland family of equally fantastic brands. Our expectations are high for the future!" added Heartland CEO Bill Viveen.

Deljo's leaders, Bill and Bob Clement, Luke Weiden, along with their talented management team and highly skilled technicians will stay on, and the business will continue to operate as normal with additional resources from Heartland.

# PHCC Holds Popular Project Management Boot Camp

. . . . . . . . . .

Falls Church, Va. – "Stop it!" was a common phrase heard during the Plumbing-Heating-Cooling Contractors—National Association (PHCC) Educational Foundation's popular Essentials of Project Management boot camp. There were 22 attendees for the four-day class conducted March 16–19. The program was broadcast live online from A. O. Smith University, with instruction from Purdue University Professor Emeritus Kirk Alter.

"Don't ever say in my company that 'the general contractor made us' do something. Stop it! Nobody makes you do anything on your jobs," said Alter in the class section on contracts. "It's all about what your company agrees to in the contract. As the project manager, you must read and understand every word of your contract and it is on you and your company to strike out or amend the harmful clauses before that contract is signed."

In the class section on jobsite planning, Alter explained "Some of you allow delivery trucks to show up any time of the day. Stop it, that's incredibly wasteful!" The attendees then learned exactly how much unloading an unscheduled delivery truck can cost in terms of manhours and dollars versus a delivery occurring at times that match the daily mobilization/demobilization cycle on a jobsite.

Alter encouraged the attendees to learn lessons from the mistakes others have made through reading a variety of business and management books. "You tell me that you don't have time to read books. Stop it! If you read just 13 pages each night, you will be able to finish an average of 12 books in a year," said Alter. The class received a long list of recommended books to continue their learning after the class.

A. O. Smith University supported the project management class through use of their studio and professional staff. A. O. Smith and Kohler Company also sponsored the class.

"We are so proud to support the PHCC Educational Foundation and the education they are bringing to contractors," said Victor Albright, digital content manager at A. O. Smith. "The management lessons taught in this program can be applied anywhere – we are often taking notes in the video control booth for our own use.

# Johnson Controls Xaap Platform Hits New Milestone

. . . . . . . . .

Milwaukee, Wisc. - Johnson Controls celebrates a milestone as the Xaap Compliance Reporting Platform surpasses one million building inspections. Since 2018, facility managers and their teams have used the Xaap compliance reporting software to test nearly 55 million individual building devices, including fire alarms, extinguishers, security devices, sprinklers, and other systems across North America. Xaap has helped these customers identify more than 500,000 deficiencies within their building systems, uncovering many opportunities to improve building safety and compliance.

"At Xaap, we're working to digitize all inspection types to help keep people and assets safe," said Evan Bombino, sales director, new product technology, global fire detection products at Johnson Controls. "As we surpass one million inspections and over 500,000 deficiencies documented, we're excited by the prospect of how this large set of Xaap data will help us optimize experiences for users and allow us to offer improved smart building products."

Xaap is a mobile- and web-based building inspection reporting application that provides a single, centralized platform for tracking, maintaining, and reporting building system compliance. The mobile app allows inspectors to capture inspection data and generate reports directly from their mobile devices. Xaap is designed to help make the lives of inspectors, technicians,

service managers, back-office teams, facility managers, and building owners easier. By streamlining the inspection process through a variety of smart application features, Xaap helps deliver accurate and efficient inspection reporting.

Xaap is available on the App Store and Google Play.

# Power Selling Pros Launches Online Show for Contractors

South Jordan, Utah – Power Selling Pros, a customer service and call handling training company, is helping improve customer service for contractors with the launch of their new show, "This Call May Be Recorded."

During the show, Power Selling Pros Head of Marketing Zac Garside listens to customer service calls and discusses how the CSR could have improved the experience.

"Customer service calls provide a great opportunity to create repeat business, but often times contractors don't emphasize or realize its importance," Garside said. "We want to change how home service contractors think about customer service because it can be a difference-maker when it comes to growing their business."

"This Call May Be Recorded" airs live every Friday at 11 a.m. MST on YouTube and Facebook. From installation calls to conversations with callers who dialed the wrong number, Garside covers a variety of situations on the show.

"When we receive a call from a customer, it is the first and only time they give us their undivided attention," said Brigham Dickinson, president and founder of Power Selling Pros. "In today's digital world, booking an appointment can easily be done online, but the customer calls because they want the personal interaction. That is the perfect opportunity for contractors to build the relationship, which is why it's vital for home service business owners to invest in the time to train their CSRs. It can take your company to the next level."



12 ICN MAY 2022

ADVERTISE IN
INDOOR
COMFORT
NEWS
CALL TODAY!
(818) 551-1555

# **CSLB Reviews Legislation Affecting HVAC Contractors, Takes Positions**

By Ted Rieger Northern California Correspondent

The Contractors State License Board (CSLB) reviewed status of current bills in the California Legislature, and took positions on bills related to contractors and CSLB operations at a teleconference Board meeting March 30. Two CSLB-sponsored bills active in the Legislature could directly impact some C-20 HVAC contractors – one would make workers' compensation insurance mandatory for all licensed C-20 contractors effective January 1, 2023; and another bill would increase the maximum fine for failure to obtain required building pemits from \$5,000 to \$30,000 for all contractors.

# Mandatory Workers' Compensation Insurance

SB 216 Dodd (D-Napa) - Worker's Compensation Insurance, Mandatory Coverage: This bill would preclude the CSLB from accepting certificates of exemption from workers' compensation (WC) insurance from three active license classifications: C-20 HVAC, C-8 Concrete, and D-49 Tree Service beginning in 2023, and from all licensed contractor classifications in three years, thus requiring all contractors (including licensees without employees) to have WC coverage and a certificate of WC insurance on file with the CSLB by 2025.

As justification, according to the CSLB, despite years of enforcement efforts, the number of WC exemptions on file with CSLB, and the number of contractors in violation of WC laws remains constant. CSLB research confirms that many of the 50 to 60 percent of licensed contractors who currently claim a WC exemption (stating that they have no employees), do in fact have employees. There is a demonstrated problem of contractors employing workers without providing WC coverage. This problem creates an unfair competitive disadvantage for law-abiding contractors who are subject to higher business costs, and it puts employees and the public at risk for workplace injuries. Based on CSLB statistics for active licenses as of January

31, 2022, of the total number of 233,737 active statewide licenses for all classifications, 53 percent claim exemptions from WC insurance. For active C-20 HVAC contractors, of the total number of 12,428 active licenses, 55 percent claim exemptions from WC insurance.

This bill was originally introduced in the Senate in January 2021 but was placed in the inactive file in May 2021 and held as a "2-year bill" to be considered again for the current 2022 session. The bill was passed from the Senate Floor in January 2022 and is now active in the Assembly. CSLB chief of legislation Mike Jamnetski reported that three amendments were proposed this year: 1. Move the effective date of the bill that requires WC for all

licensees one year to 2026 since the bill was delayed a year. 2. Add the C-22 Asbestos Abatement contractor license to the licenses that would be required to have WC in the first year (2023). 3. Exempt a joint venture license from the WC requirement when one or more of the licensees forming the joint venture have a WC policy.

This bill is supported by a number of contractor and labor organizations including the American Subcontractors Association, Cal-SMACNA, and the Plumbing-Heating-Cooling Contractors of California.

# Building Permit Violation Fine Increase

AB 1747 Quirk (D-Hayward) -

Contractor Disciplinary Action and Fines: This bill would add the violation of willful or deliberate disregard of any state or local law relating to the issuance of building permits to the list of violations for which the CSLB is authorized to assess a civil penalty up to \$30,000.

The CSLB is a sponsor and supporter of this bill that arose out of CSLB consultation with the California Energy Commission (CEC) on ways to increase compliance with Title 24 clean energy and quality installation standards for HVAC equipment. Construction projects not installed to code place owners at risk, and in the case of HVAC systems, prevent consumers from achieving energy savings

and compromise California's building decarbonization efforts. The CSLB already has authority to discipline contractors for failure to comply with permit requirements. To clarify and address the seriousness of this issue in the law, this bill creates a generalized subdivision for permit violations, along with other serious health and safety violations, that effectively increases the fines for such violations from a maximum of \$5,000 to \$30,000.

This bill is supported by the California Building Officials (CALBO), the American Subcontractors Association of California, the Western Electrical Contractors, and sheet metal workers associations and local unions.



# OPEN YOUR PHONE. SCAN THIS CODE.



# **GROW YOUR CAREER.**

For quick, easy, and direct on-line enrollment, simply open your Smart Phone Camera and hover over the QR code to access PG&E class registration.

PG&E offers free HVAC/R training courses designed to advance your skills.

# Get started with advanced learning today!

www.pge.com/hvactraining

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

# MAY 2022

IHACI Webinar AC/HP Refrigeration Module (Four-Night Class) Instructor: Mitch Bailey Wed., May 25 - Part 1 Thurs., May 26 - Part 2

### **JUNE 2022**

IHACI Webinar
AC/HP Refrigeration Module
(Four-Night Class, continued from May)
Instructor: Mitch Bailey
Wed., June 1 - Part 3
Thurs., June 2 - Part 4

# JUNE 2022 (cont.)

IHACI Webinar
Air Distribution Module
(Four-Night Class)
Instructor: Mitch Bailey
Wed., June 22 - Part 1
Thurs., June 23 - Part 2
Wed., June 29 - Part 3
Thurs., June 30 - Part 4

### **JULY 2022**

No classes



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

You can register online by visiting: pge.com/hvactraining. Attendees must register for each night separately and registration is on a first-come, first-served basis. "PG&E" refers to Pacific Gas and Electric Company, a subsidiary of PG&E Corporation. ©2022 Pacific Gas and Electric Company. All rights reserved.

These offerings are funded by California utility customers and administered by PG&E under the auspices of the California Public Utilities Commission.



www.indoorcomfortnews.com

# State Leaders Launch Program Encouraging Construction of All-Electric Affordable Housing

### **Continued from Page 1**

State Senator Henry Stern. "I am proud to have been part of creating this new program and look forward to furthering the conversation with my legislative colleagues this year to ensure we protect public health while we forge ahead on essential climate solutions."

The Building Initiative for Low-Emissions Development (BUILD) Program was developed to reduce greenhouse gas (GHG) emissions and expand access to affordable all-electric buildings to include those most vulnerable to pollution and climate change. The program was created by Senate Bill 1477, which Senator Stern authored. Buildings are a major contributor to California's GHG emissions, emitting a quarter of the state's GHG, according to the 2021 California Building Decarbonization Assessment.

Governor Gavin New-

som's 2022–23 budget proposal builds on this effort and includes one of the most significant investments for building decarbonization in the country, a total of \$922 million over two years.

"Prioritizing affordable, multifamily housing is one of the key pillars of California's decarbonization journey," said CEC Commissioner J. Andrew McAllister. "Programs like BUILD are essential to moving the market on new climate solutions while ensuring all Californians benefit through targeted investments."

Representatives from groups that sponsored SB 1477, such as the California Building Industry Association, and the California Public Utilities Commission (CPUC), which is the lead agency for the program, attended Friday's event. The BUILD program design was developed by the CEC in collaboration with the CPUC, based on extensive stakeholder engagement and input.

Incentives are limited to \$2 million per applicant. Applicants must be constructing new single- or multi-family homes in which electricity is the only fuel for space heating and cooling, water heating, cooking, and clothes drying. The program also requires the housing lower residents' utility bills

The program funds between \$1,000 - \$3,000 per bedroom. Incentives vary by building design and climate zone and are based on the estimated amount of GHG saved by opting for allelectric construction compared to a mixed-fuel development that might use natural gas for heating, for instance. Projects that further reduce GHG emissions with specific technologies - such as electric vehicle (EV) charging stations or appliances using refrigerants with low global warming potential can qualify for additional reimbursement.

Applicants constructing their

Applicants must be constructing new single- or multi-family homes in which electricity is the only fuel for space heating and cooling, water heating, cooking, and clothes drying.

first all-electric, low-income multi-family building may be eligible for the New Adopter Design Award, which provides \$100,000 to defray direct design costs such as architecture or engineering. The hope is to encourage developers to make all-electric a part of the design process.

To help builders and contractors navigate the challenges – from permitting and design to construction itself – the Association for Energy Affordability, Inc. will provide technical assistance. Builders of all-electric, low-income housing in the gas territories operated by Pacific Gas and Electric Company, San

Diego Gas & Electric Company, Southern California Gas Company, and Southwest Gas Corporation are eligible, whether or not they receive BUILD awards. The inquiry form can be found online.

For program questions, contact BUILD@energy.ca.gov.

The California Energy Commission is leading the state to a 100 percent clean energy future. It has seven core responsibilities: developing renewable energy, transforming transportation, increasing energy efficiency, investing in energy innovation, advancing state energy policy, certifying thermal power plants, and preparing for energy emergencies.

### **CEC Zoom Workshop**

**Continued from Page 1** 

reasons.

IHACI Board member and HVAC contractor Bob Wiseman with Canoga Park Heating & Air Conditioning was part of the workshop's contractor panel. Focusing on the residential and light commercial HVAC market, Wiseman gave a presentation on "The Need for Contractor Self-Certification."

Wiseman first explained that compliance with the intent of Title 24 is mandatory if California is to meet its long-term energy and climate goals. Title 24 requires that all HVAC systems in California meet certain efficiency levels. He said, "We know that only a minority of systems are performance tested. Studies show that permitted work is often as bad as unpermitted work." He said HERS testing has raised awareness of the importance of efficiency in every HVAC system, but HERS is unable to meet all the demands of compliance with

Explaining the reasons for, and benefits of, self-certification Wiseman said, "We need a verification process that works within the contractor's normal, daily workflow and provides a streamlined process." He then presented information about Visual Service (VS) technology, a digital system using smart phones, tools and software to assist HVAC service and installation technicians at every job site, that is now being beta-tested by

seven Southern California contractors. "VS was initially developed for the HVAC industry to deal with poor system performance and the technician shortage," Wiseman said. "However, it became very clear that VS has a clear path to helping with compliance with Title 24," he added.

Wiseman observed: "Verification of HVAC system performance at the time of installation is critical. Technology available today allows for real-time verification of system performance and makes the process more convenient for customers, and more cost-effective for all parties involved." Unlike HERS system testing, VS does testing and logs data on every single job, not just a sampling of jobs, and all data is stored in the cloud for later review and geo-tagged to a specific location. Wiseman concluded, "The time has come to use a better way to address compliance and improve service and installation."

California Building Industry Association (CBIA) representative Tom Paine said for his group's member contractors, who primarilv work in new construction and generally follow permitting and compliance procedures, "CBIA is largely, fairly comfortable with where we are now." He said existing homes have more compliance issues and offer more opportunity to meet the state's energy and climate goals. Paine explained, "Avoiding compliance is a result of avoiding costs and complexity. The system as it exists, incentivizes non-compliance, and it may be better to reward contractors to do the job properly." He suggested allocating funding for incentives or rebates to contractors to cover the added costs of permits and for going through the HERS and compliance process.

During public discussion, Chris Walker of Cal-SMACNA expressed frustration with how the state's recently implemented Mechanical Acceptance Test Technician Certification Program for non-residential building projects has turned out. While acknowledging that mechanical acceptance testing has only been required since October 2021, he said the requirement is not being enforced. "I have a lot of contractors who are frustrated and feeling foolish about all the time and money they spent to get training and certification of technicians in order to do the right thing, and then not be able to do the testing because building departments don't understand the requirement, or don't require acceptance testing before approving projects," Walker explained.

During the panel discussion of building officials, most advocated simplifying the Energy Code and making it easier to reference and find specific topics. In addition, some admitted they did not have adequate personnel to handle the workload, and don't have people with knowledge and expertise in all areas covered by code requirements. Oscar Diaz with the City of Modesto Building Department said his department has the following priority list for code enforcement based on health and safety concerns: Building Code, Electrical Code,



BOB WISEMAN, IHACI BOARD MEMBER AND HVAC CONTRACTOR, GIVES A PRESENTATION ON "THE NEED FOR CONTRACTOR SELF CERTIFICATION."

Plumbing Code, Mechanical Code, Energy Code and Green Code. Similarly, the Energy Code is near the bottom of the list of priorities for many building departments.

### SB 1164 Proposes State HVAC Equipment and Compliance Registries

A bill now before the Legislature, SB 1164 Stern (D-Los Angeles), would require the California Air Resources Board (CARB), in consultation with the CEC and the Contractors State License Board (CSLB) to submit a report to the Legislature by July 1, 2023 proposing a statewide HVAC equipment sales registry and compliance tracking system to identify the installation of HVAC equipment without a permit or without testing of proper performance. The registry system will require stores and dealers that sell HVAC equipment to register the equipment serial number and the contractor license number of the purchaser. The intent of

the registry is to also allow local building departments to identify noncompliant installations in their jurisdictions and allow the CSLB to identify and investigate contractors that routinely violate licensure requirements by failing to obtain permits, and who fail to comply with Title 24.

The bill would also require the CEC, in consultation with CARB and CSLB, to submit a report to the Legislature by July 1, 2023 proposing a statewide compliance document repository and data registry that would store compliance, installation, and acceptance test documentation required under the Title 24 regulations.

This bill passed its first Senate Committee hearing in late March with no formal opposition presented or on file. The bill is supported by the Western States Council of Sheet Metal Workers, the California State Pipe Trades Council, and Cal-SMACNA. (Amendments have been suggested to shift the report

Continued on Page 21

# Helping you succeed with online classes



Access online classes from the comfort of your home or office



# **MAY CLASSES**

4-PART SERIES **IHACI - AC & HP REFRIGERATION MODULE** May 18 & 19 | 6 p.m. - 8 p.m.

May 25 & 26 | 6 p.m. - 8 p.m. 2-PART SERIES

**D&R** International - Variable **Frequency Drive** May 10 & 12 | 9 a.m. - 11 a.m.

2-PART SERIES

D&R International - Energy **Management Systems and HVAC Controls** May 24 & 26 | 9 a.m. - 11 a.m.

**ON-DEMAND** 

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

hvacredu.net/sdgetraining

**ON-DEMAND** 

**D&R International - Commercial Heat** Pump Water Heating Online Education learn.drintl.com/commercial-hpwh-training-sdge

**ENERGY CODE ACE** Codes & Standards - 2019 Title 24, Part 6 Essentials energycodeace.com





# REBATES UP TO \$6,600\* PER UNIT FOR CALIFORNIA CONTRACTORS



TECH Clean California rewards contractors for recommending and installing heat pumps in California homes. When you install a Mitsubishi Electric heat pump HVAC system in your eligible customers' homes, you can earn up to \$6,600 in incentives for each unit.

TECH is designed specifically to help contractors keep up with the market and policy shift towards new technologies. With over \$120 million in funding, TECH Clean California can:

- · Offset installation costs with incentives paid directly to you
- Offer the chance for bonus incentives and a free heat pump water heater
- Provide you with technical and sales training from manufacturers and world-class instructors

# As a participating Contractor, you'll also receive:

# **Contractor Organization \$5,000 bonus incentive**

- Attend a TECH provided training + install 5 HP HVAC systems
- Install 15 HP HVAC systems

# **Technician Bonus Incentive**

- Earn a \$100 gift card/day of TECH provided training attended



# **Single Family HVAC Incentives**

# **Baseline Heat Pump HVAC Incentives**

Equipment Type	Minimum Efficiency Requirements	Incentive / Unit
Package, split, mini/multi-split	Title 24 code minimum	\$3,000

# **Enhanced Heat Pump HVAC Incentives — Efficiency**

Equipment Type	Size Category	Tier	Seasonal/Part-Load Cooling Efficiency	HSPF	Incentive / Unit
Package, split, mini/multi-split	< 5.4 tons	Title 24 code minimum			\$3,000
		1	16.0 SEER	9.0	\$3,900
		2	18.0 SEER	9.7	\$4,800

# **Enhanced Heat Pump HVAC Incentives — Quality Installation**

Quality Installation Measure	Qualifier	Incentive
Manual J Completed	Provide calculations	\$600
Duct sealing/replacement and testing	5% total leakage or less	\$600
Field Measured Performance (based on ASHRAE 221-2020)	Heating System Performance Ratio (HSPr) and Cooling System Performance Ratio (CSPr) = 80% or better	\$600

# Incentives for Heat Pump HVAC Systems Serving Individual Apartments

Business Constitution	System	Туре	Incentive / Equipment	
Previous Space Heat Source	Description	AHRI Test Standard		
Non-heat pump systems	Split or rooftop heat pump (ducted or ductless)	210/240	\$2,000	
All except PTHPs	PTHP, SPVHP, or unitary through the wall/ceiling heat pump	310/380, 390	\$500 (single or two-stage compressor) \$1,000 (variable capacity/inverter-driven)	

# **Incentives for Heat Pump HVAC Systems Serving Multiple Apartments**

Previous Space Heat Source	System Type	Incentive / Apartment Served
Non-heat pump systems	HP HVAC equipment serving multiple apartments	\$1,000



\*Learn about available incentives and sign up at: https://energy-solution.com/tech-incentives

Scan the QR code using your mobile device or tablet to go there now, or call (833) 256-0560



# **Motors and Drives, Compressors and Controls**

AEGIS Shaft Grounding Rings



**AEGIS®** Shaft Grounding Rings have been made standard equipment on the Baldor-Reliance® Food Safe line of motors. The addition of the internal shaft grounding ring provides increased motor reliability and stops early bearing failure from EDM. The Baldor Food Safe line consists of 25 models with horsepower ratings from ½ HP up to 10 HP. They are ideal for food processing, high pressure washdown, sanitary washdown, outdoor or caustic environment applications. AEGIS® Shaft Grounding Rings have been integrated into these motors to mitigate the effects of bearing currents caused by variable frequency drives (VFDs). When VFDs are used to control AC motors, voltage is induced on the motor shaft. This voltage builds up until it is strong enough to discharge by arcing through the bearings, causing frosting, pitting, fusion craters, and fluting. Over time, this bearing current causes premature bearing failure.

AEGIS° Shaft Grounding Rings protect motors by channeling VFD-induced bearing current safely to ground. Continuous circumferential rows of conductive microfibers, embedded securely in the ring's patented AEGIS° FiberLock

channel, completely surround the motor shaft and provide millions of discharge points for harmful shaft voltage. This unique design creates the path of least resistance that effectively diverts current away from the bearings to ground. The microfibers themselves are specially engineered for exceptional conductivity and flexibility to minimize wear and prevent breakage. AEGIS® rings are the only long-term shaft grounding technology proven effective in millions of VFD/motor applications worldwide.

AEGIS® bearing protection is available on motors from most leading manufacturers and can be specified at the time of purchase. Motors can also be retrofitted either in the field or at motor repair shops.

**More information:** www.est-aegis.com.

# Carrier TruVu Dual IP Controllers

. . . . . . . . .



To meet the need for precise, reliable automated control in the most demanding HVAC zone applications, **Carrier** has released a new line of TruVu™ Dual IP Advanced Application Controllers for the i-Vu® building automation system. These controllers were designed to ease installation and enhance system control and monitoring. Carrier is a part of Carrier Global Corporation (NYSE: CARR), the

leading global provider of healthy, safe, sustainable and intelligent building and cold chain solutions.

Designed for robust networking in single equipment and advanced zone control applications, the five new native Building Automation and Control Network (BACnet) controllers feature faster processors, dual IP high-speed communications ports and higher-capacity memory. All support the full line of Carrier's communicating and non-communicating sensors and actuators, and feature an expansion port designed to accommodate future communication cards. Options include basic control, BACnet or MODBUS integration, on-board air flow sensors and future support for Input/Output (I/O) point expanders. The new BACnet controllers also support sophisticated network redundancy via high-speed IP communication.

Built-in, fail-safe dual Ethernet ports support daisy chain topologies to make installation easier, and support for IP network Ring topology using Rapid Spanning Tree Protocol (RSTP) facilitates network redundancy. All programs and historical data are stored in non-volatile memory, eliminating the need for batteries, while a capacitor-backed real-time clock keeps time for up to three days during power failures and network interruptions. USB ports provide local access for system start-up and troubleshooting.

All of the new models are fully compatible with Carrier's pre-engineered application libraries and support custom control sequences using the Snap graphical programming tool.

More information: www.carrier.

Emerson Copeland ZPK7

. . . . . . . . .



Emerson has launched the next generation of Copeland™ ZPK7 single (fixed) speed scroll compressors for residential and light commercial HVAC applications including heat pumps, split air conditioning, packaged systems, rooftops and geothermal systems.

The Copeland™ ZPK7 is the most efficient fixed speed scroll compressor in the brand's 100-year history. The new ZPK7 fixed-speed

scroll compressor platform is currently optimized for R410A refrigerant and provides enhanced performance at the SEER2 B rating point condition and at key HSPF2 part load operating conditions. These large efficiency gains are paired with new, innovative compression technology and manufacturing processes that result in reduced compressor to compressor performance variability.

"Higher efficiency requirements mandated by 2023 present challenges for our customers and are driving development of products to help overcome those challenges," said Brandy Powell, vice president and general manager, Residential Air Conditioning for Emerson. "Backed by the Copeland brand's legacy of reliability and inventiveness, this next platform of compressors offers the efficiency gains to support the industry's shift to more sustainable, environmentally friendly solutions."

Emerson's Next-Generation Fixed-Speed (ZPK7) Scroll Compressors offer:

- Regulation-ready efficiency to help meet new 2023 DOE standards
- Platform for next generation of A2L compressors
- 2021 AHR Innovation Award Winner for Air Conditioning

Copeland's ZPK7 fixed-speed scroll compressors have initially launched with 1.5-5-ton single phase models, with three-phase models following in 2022. This next-generation lineup will offer low-GWP compatibility and an optimized platform for A2L refrigerants.

**More information:** Climate. Emerson.com.

Greenheck Vari-Green Motor

Greenheck continues to lead

• • • • • • • •

the industry in electronically commutated motor offerings by incorporating its Vari-Green® motor in select models of axial direct drive rooftop fans. This industry-first offering provides all of the controllability of a variable frequency drive (VFD) in a smaller, low maintenance package that simplifies installation and reduces field costs. Greenheck axial direct drive fan models now available with Vari-Green® technology include exhaust and supply hooded rooftop models RE2, RS2, RCE3, and RCS3 in seven sizes ranging from 24 to 60



and exhaust upblast rooftop model RDU in five sizes ranging from 24 to 48. These models are available with Vari-Green® single and three-phase motor options up to 5 hp and are ideal for warehouses, distribution centers, and manufacturing facilities. Vari-Green® motors feature IE5 Ultra-Premium motor efficiencies and integrated, pre-programmed drives that eliminate the need to purchase a separate VFD. Additional Vari-Green® features include standard onboard internal shaft grounding and onboard motor protections including overheat, locked rotor, stall, and overload.

Greenheck is the worldwide leader in manufacturing and distributing air movement, control, and conditioning equipment.

**More information:** www.greenheck.com.

Johnson Controls TEC3000



Johnson Controls, a global leader for smart, healthy and sustainable buildings, and provider of seamless occupant experiences with OpenBlue connected suite of technologies, today launches one of the first-of-its-kind advanced control ventilation configurations for thermostat controllers. Designed for the TEC3000 Series Smart Thermostat, the feature adheres to guidance from the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) for safe building reopening and readiness during the Covid-19 pandemic.

The new TEC3000 Series feature allows building operators to configure air changes to improve air quality and help reduce the concentration of airborne pathogens keeping occupant health and safety top of mind. Users

Continued on Page 20



SMISUNG

HVAC. Built brave.

Your system for your style.



# 360 Cassette

This innovative, one-of-a-kind 360 Cassette is simply unrivaled. In fact, this circular cassette is the ultimate combination of technology and beauty, which delivers exceptional comfort. In other words, it's unbelievable.

# **Features:**

# **Bladeless Design**

Standard 4-way ceiling cassettes use blades on 4 sides of the unit to distribute air. This 4-sided distribution can cause up to 25% reduction in airfow and creates uneven room temperature, resulting in hot and cold spots. With bladeless technology and the use of 3 booster fans, the 360 Cassette provides even, horizontal airfow.

### **Directional Airfow Control**

The booster fans can be individually set at the same or different angles within a 10-60° range. The swing function is available when all 3 booster fans are operating in unison.

## **Maximize Energy Savings**

A Motion Detection Sensor (MDS) will automatically turn off or change the set temperature based on room occupancy and learn occupancy patterns to reduce run time between occupied and unoccupied times. Use of MDS is optional (sensor sold separately).

# **Advanced Commissioning and Service**

360 Cassette is equipped with a removable EEPROM chip on the main circuit board to store unit option settings, serial number, unit tag, and other field programmed data. This allows for ease of startup, commissioning, product registration, and future service work when using Samsung service software (S-Net 3).

# **Style Options**

The 360 Cassette is offered in both black and white for open-type (circle) and ceiling-type (square) fascia panel options.

Samsung offers custom printing on 360 Cassette panels so you can personalize the look and feel of your space with custom graphics or colors. Use your logo, color, pattern, or photograph in order to blend in or stand out.



Available for download on the Google™ Play store and App Store ®. A network connection is required. Samsung application account is necessary.



# SAMSUNG

HVAC. Built brave. www.samsunghvac.com

800/937-7222

ARIZONA Avondale 602/572-2953 Deer Valley 623/580-4101

Fort Mohave 928/768-2197

Gilbert 480/813-4628 Peoria 623/334-8302 Phoenix 602/253-2771 Tucson 520/903-3117

www.us-ac.com • 🗘 🖸 💆

CALIFORNIA Anaheim 714/776-3170 Bakersfield 661/322-7222 Burbank 818/840-0089 Cathedral City 760/770-4520 Chatsworth 818/678-1750 City of Industry 626/854-6868 Concord 925/349-3712 Culver City 310/204-2230 El Cajon 619/258-0672 El Centro 760/370-5530 Escondido 760/291-1281 Fairfield 707/424-6050

Los Angeles 323/897-6969 Modesto 209/577-2335 Newbury Park 805/376-1723 North Highlands 916/482-3572

Ontario Redding 909/987-5016 530/722-0144 Oxnard Riverside 805/988-3650 951/786-3500 Palm Desert S. San Francisco 760/200-5225 650/871-8100 Paso Robles San Bernardino 805/238-9353 909/885-3206

San Diego 858/279-9750 San Jose 408/278-1555 isco San Leandro 00 510/618-2300 ino Santa Barbara

805/962-2999

Santa Fe Springs 562/801-5432 Santa Rosa 707/566-9810 Signal Hill 562/981-2010 Stockton 9 209/466-4153

e Springs Temecula 1-5432 951/296-6557 valencia 6-9810 661/666-9544 Hill Van Nuys 1-2010 818/464-3387

IDAHO N 57 Boise S 208/672-1244 7 44 or 800/727-9936

NEVADA Sparks 775/329-3455 UTAH Salt Lake City 801/485-8071 or 800/333-8436

# **Motors and Drives, Compressors and Controls**

### **Continued from Page 18**

can choose from two ventilation options to flush out stale air before, during and after a building is occupied – demand control ventilation or advanced control ventilation.

When demand control ventilation is configured, users can set desired parameters such as the preoccupancy air purge time. When advanced control ventilation is configured, the pre-occupancy air purge time will default to the ASHRAE-specified duration of two hours. Additionally, the post-occupancy purge time can be set for a desired duration before switching to unoccupied schedule settings to maintain temperature, humidity and ventilation in the zone.

Demand control ventilation and advanced control ventilation work with Johnson Controls' proprietary "Optimal Start" algorithm. When enabled, the algorithm will take control actions dynamically prior to the scheduled occupancy time to achieve a zone's temperature and humidity setpoints -- even if the outdoor damper stays open -- to meet advanced control ventilation needs. When it comes to ventilation setpoints, users will be able to configure options for CO2, outdoor air temperature, and supply air temperature.

The advanced control ventilation configuration also allows building owners to take advantage of additional options that provide more flexibility during these unprecedented times. Users can enable minimum ventilation when a zone is unoccupied, which keeps the zone filled with fresh outside air if outdoor air temperature permits. Setting the unoccupied damper minimum position allows the user to adjust the outside air damper opening percentage dur-

ing unoccupied hours.

Available as a software update, the new features also provide a humidity alarm that can be enabled during occupied or unoccupied hours that will alert users when zone humidity is out of the desired range. Additional service alarms will notify users of five T24-specified ECON faults on the device home screen and in BACnet and N2 communication modes for conditions such as the following: air temperature sensor failure, not economizing when it should, economizing when it should not, damper not modulating when it should, and excess outdoor air/damper not closed when it should.

This update comes on the heels of a recently released update for the TEC3000 Series that offers enhancements including a new rooftop and heat pump dehumidification feature and a minimum

hourly fan circulation feature. Together, the new features help to serve the company's mission of reimagining building performance to support healthy people, healthy places and a healthy planet.

The new feature set includes:

- Demand control ventilation with pre-occupancy purge time and minimum ventilation setting
- Advanced control ventilation with ASHRAE-compliant pre-occupancy purge time, post-occupancy purge time, minimum ventilation setting, unoccupied damper position, and humidity alarm
- Ventilation setpoint options, including CO2 setpoint, low out-door air temperature setpoint, and high and low supply air temperature limits
- Occupant sensor ventilation to reduce the rate of outdoor air flow when occupants are not present

More information: www.John-sonControls.com.

# Regal Beloit Powertrain

Regal Beloit Corporation, a global leader in the engineering and manufacturing of high-efficiency electric motors and power transmission products, is continuing to enhance its industrial powertrain capabilities. Regal, with its leading power transmission and motors offering, and deep domain expertise in a range of industrial end markets,



combined with enhanced component integration and optimization capabilities, is now even better positioned to maximize uptime and reduce energy consumption in customers' powertrain applications, whether for new builds or existing installations.

The Regal® electromechanical powertrain offering encompasses a broad range of Regal-produced components (e.g., motors, speed reducers, gearing, couplings, bearings, belt drives and more) that can be integrated to create complete end-to-end solutions, customized to meet specific application requirements, and optimized to maximize energy efficiency and productivity. In addition to helping customers design, assemble and commission their powertrains, Regal can monitor a solution's ongoing performance through its cloud-based Percep- $\mathsf{tiv}^{^{\scriptscriptstyle\mathsf{TM}}}$  internet of things (IoT) platform. Data collected and analyzed via Perceptiv can support a wide range of diagnostic and prognostic activities, enabling customers to sustain high performance from their assets.

"At Regal, we create a better

tomorrow and endless potential for our customers by energy-efficiently converting power into motion," said Louis Pinkham, Regal's Chief Executive Officer. "We optimize our engineered mechanical power transmission components and motors to work better together, more efficiently and effectively. The ongoing asset monitoring we offer across the powertrain with Perceptiv intelligence helps to maximize uptime and prevent costly outages, while simplifying the maintenance, repair and operations experience for our customers."

Pinkham continued, "Earlier this year, Regal announced a transformational merger with Rexnord's Process & Motion Control business, which is on track to close in the fourth quarter. The merger is expected to further enhance our capabilities across the industrial powertrain, especially in higher-torque applications, where Rexnord is strong, while deepening our presence in attractive high-growth end markets such as renewable energy, aerospace and e-commerce, and in a broader set of geographies."

Currently, Regal's electromechanical powertrains are used within industries such as bulk and unit material handling, metals, pulp and paper, mining, and other critical industrial applications.

**More information:** www.regalbeloit.com/products/powertrain.

# **Industry Events**

# Registration Open for 2022 ASHRAE Annual Conference in Toronto, Canada

Registration is now open for the 2022 ASHRAE Annual Conference, June 25-29 at the Sheraton Centre Hotel, Toronto.

The five-day conference includes sessions addressing current trends and technologies in the HVAC&R industry, as well as tours, social events and a keynote message from Fredi Lajvardi, nationally recognized STEM educator and subject of IMAX film, Dream Big.

"ASHRAE's Annual Conference offers a unique combination of education, technology and networking in an effective format where industry professionals can share best practices, insights and real-world experiences with peers from around the world," said 2021-22 ASHRAE President Mick Schwedler, P.E., Fellow ASHRAE, LEED AP. "We're excited to come together

in Toronto – a vibrant city known for innovation – and know the conference will be a worthwhile experience for all in attendance."

This conference's technical program is comprised of eight tracks, with over 70 sessions and over 200 speakers. Some topics include decarbonization, environmental health and energy system integration and building performance. Tracks include:

- Fundamentals and Applications
- HVAC&R Systems and Equipment
- 9th Annual Research Summit
- IAQ, Energy Use, Comfort and Health of Sustainable Buildings
- Connected Buildings, Connected Communities
- Buildings in the Aftermath of COVID-19
  - Professional Development



and Education

• Cold Climate Building System Design, Operation and Resilience

ASHRAE will also conduct business, committee and technical meetings in the weeks leading up to, and during the conference.

Members will be recognized for Society and industry achievements and 2022-2023 ASHRAE President Farooq Mehboob will present the inaugural Society theme address on "Securing Our Future."

Registration includes:

• Access to technical program from Sunday, June 26 – Wednesday, June 29 (seminars, workshops, paper sessions, debates and panels)

- Access to Conference Proceedings
- Networking opportunities
  The cost to attend the conference is \$690 for ASHRAE members (\$960 for non-members, which includes an ASHRAE membership for one year).
  Early bird discounts are available. ASHRAE is currently evaluating virtual-only registration options for the conference. Tickets for tours, select social events, and ASHRAE Learning Institute
  Courses can be purchased during the registration process.

The ASHRAE Ventilation 2022: 13th International Industrial Ventilation Conference for Contaminant Control will immediately precede the ASHRAE Annual Conference at the same location, June 22-24. Dual registration opportunities will be available at a discounted rate. For more information, visit ashrae. org/ventilation2022.

To learn more about the 2022 ASHRAE Annual Conference and to register, visit ashrae. org/2022annual.

ASHRAE is an American professional association seeking to advance heating, ventilation, air conditioning and refrigeration (HVAC&R) systems design and construction. ASHRAE has more than 57,000 members in more than 132 countries worldwide. Its members are composed of building services engineers, architects, mechanical contractors, building owners, equipment manufacturers' employees, and others concerned with the design and construction of HVAC&R systems in buildings.

# **Industry Events**

# **ISH China & CIHE Postponed Due to Pandemic**

The organizers of ISH China & CIHE made the decision to defer the fair in order to support pandemic containment efforts. Originally scheduled to be held May 9-11, 2022 at the New China International Exhibition Center in Beijing, the fair is jointly organized by Messe Frankfurt (Shanghai) Co Ltd and CIEC GL events (Beijing) International Exhibition Co Ltd, who will announce the new timeslot for the event to return.

"In view of recent outbreaks in multiple provinces and cities in China and the stringent travel restrictions in place, we have decided to postpone ISH China & CIHE," said Richard Li, general manager of Messe

Frankfurt (Shanghai) Co Ltd. "Given the large number of domestic and overseas companies that are represented at the fair, the welfare of our participants is paramount. Holding the fair at a later date will offer wider accessibility for those travelling to the event, offering industry players an optimal environment to explore both domestic and global resources. I'd like to express our gratitude to all participants for their understanding and support."

"Our co-organizers and supporters of the fair, as well as the exhibitors are on-board with this decision and believe it was right to postpone the fair in order to give all parties concerned the confidence that it will go ahead with minimal disruption," added Hongbo Li,

GL events (Beijing) International Exhibition Co Ltd. "Together with our stakeholders, we are keeping track of the situation and monitoring how it will affect the organization of large scale events. We look forward to welcoming participants from near and far to Beijing at a later date to reconnect and establish stronger business cooperation with the HVAC industry."

As one of the largest HVAC exhibitions in Asia, ISH China & CIHE covers a variety of HVAC products and technologies, including intelligent control, home comfort, and plumbing. In the 2021 edition, the fair welcomed 980 exhibitors and 69,243 visitors.

Another ISH event in China, ISH Shanghai & CIHE, will be 在友电暖科技

ATTENDEES AT A PREVIOUS ISH CHINA & CIHE EVENT.

hai New International Expo Centre. For more information about ISH China & CIHE and ISH Shanghai & CIHE, visit www.ish. hk.messefrankfurt.com.

ISH China & CIHE is headed

Frankfurt, Germany, a trade fair for HVAC and Water, which will next take place March 13-17,

For more information, visit www.ish.messefrankfurt.com.

# **CEC Workshop Continued from Page 14**

requirements for the HVAC registry from CARB to the CEC as the lead agency.)

## 2025 Energy Code

Javier Perez of the CEC's Efficiency Standards Office gave a workshop presentation highlighting key subject areas proposed to address for the upcoming 2025 Energy Code rulemaking cycle:

- Continue to expand upon high efficiency heat pump baselines for space conditioning and water heating systems.
- Promote demand flexibility, PV generation and energy storage.
- Focus on existing buildings: additions, alterations and smaller homes.
- Equity and affordable new housing program integration.
- Electric vehicle readiness in new construction.
- Interagency coordination. The 2025 Energy Code pre-rulemaking phase activities and workshops will continue through August 2023 and Express Terms are planned to be issued around October 2023. The formal rulemaking is scheduled from January to May 2024. Adoption of the 2025 Energy Code is expected at a May 2024 CEC Business Meeting. The CEC webpage for the 2025 rulemaking and information on workshops, submitting comments, etc. is available at:

https://www.energy.ca.gov/ programs-and-topics/programs/ building-energy-efficiencystandards/2025-building-energy-efficiency.



GILBERT, AZ 480-571-3710

MESA, AZ 480-968-0168

PEORIA, AZ

PHOENIX, AZ

SCOTTSDALE, AZ

TOLLESON, AZ (SW Phoenix) 602-973-8063

**TUCSON, AZ** 

YUMA, AZ

**ANAHEIM, CA** 714-635-5956

**EL CAJON, CA** 

**ESCONDIDO, CA** 

FRESNO, CA

**IRWINDALE, CA** 

LONG BEACH, CA

ONTARIO, CA 909-987-4207

**PASO ROBLES, CA** 

POMONA, CA

**RIVERSIDE, CA** 

**SAN JOSE, CA** 408-477-1799

**TEMECULA, CA** 

THOUSAND PALMS, CA

**UNION CITY, CA** 

VAN NUYS, CA 818-781-3123

Connect with us on

ALBUQUERQUE, NM

LAS VEGAS, NV 702-733-7230

www.indoorcomfortnews.com ICN MAY 2022 21

We're Open Every Saturday Morning!

remichel.com

# LET'S DO GREAT THINGS TOGETHER.





# BECOME AN IHACI MEMBER TODAY.

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

# **Industry Education**

# Applications Now Open for Harbor Freight Tools for Schools Prize for Teaching Excellence

Applications are now open for the 2022 Harbor Freight Tools for Schools Prize for Teaching Excellence, which will award cash prizes totaling \$1.25 million to 20 of the best U.S. public high school skilled trades teachers and their programs.

Teachers can apply through May 20, 2022 at https://hft-forschoolsprize.org/.

The mission of Harbor Freight Tools for Schools is to increase understanding, support and investment in skilled trades education in U.S. public high schools. The prize is its flagship program.

'The United States is currently facing down an urgent nationwide shortage of skilled trades workers. Public high school skilled trades teachers and their students will be a critical part of the solution to this urgent problem. The prize honors and rewards these outstanding teachers and their programs," said Danny Corwin, executive director of Harbor Freight Tools for Schools. "In the six years since the prize was created, we have honored 88 prize-winning teachers from around the country. We continue to collaborate with them throughout the year to help advance this critical field of education."

The best skilled trades programs embody what great hands-on teaching and learning should look like in any classroom. Excellent skilled trades teachers use project-based learning, teach skills like leadership and collaboration, and help students apply academics to the real world.

The Harbor Freight Tools for Schools Prize for Teaching Excellence was started in 2017 by Harbor Freight Tools owner and founder Eric Smidt. The prize recognizes outstanding instruction in the skilled trades in U.S. public high schools and the valuable work of teachers who inspire students to learn a trade that prepares them for life after graduation.

"Our country is making a massive investment in infrastructure, such as roads, bridges and broadband. In order to make those investments, we must rapidly expand our ability to train the next generation of skilled trades workers," Smidt said. "This prize is first and foremost a way to

celebrate skilled trades education and thank our outstanding high school skilled trades teachers who don't receive the recognition and respect they deserve. We are working to shine a spotlight on their excellent work so it can be celebrated and replicated at other schools."

A recent independent evaluation of the prize found that it has a dramatic impact on the winning teachers and their programs. Most said that the prize contributed to enrollment increases in their classes, an increase in local businesses reaching out to them to collaborate and an increase in donations to their programs. They also said winning the prize helped them strengthen relation-

ships with community colleges. Most significantly, winning teachers are seeking new leadership opportunities and now see themselves as advocates for excellent high school skilled trades education.

This year the number of grand prize winners jumps from three to five, increasing the overall number of prize winners from 18 to 20. The five grand prize winners will receive \$100,000 each, with \$30,000 going to the teacher and \$70,000 going to their program. Fifteen additional prize winners will each win \$50,000, with \$15,000 going to the teacher and \$35,000 going to their program.

Past winners of the prize are teachers who have led their students to rebuild homes destroyed by hurricanes, manufacture parts for major

aerospace companies and run live automotive repair shops on their high school campuses.

About the Prize:

- Harbor Freight Tools for Schools has received more than 3,300 applications for the prize since 2017.
- The benefits of the prize have had an impact on more than 100,000 students in skilled trades programs nationwide.
- \$4.7 million in cash awards have been given to 88 winning teachers and their skilled trades programs.
- Winning teachers are invited to an annual convening called Let's Build It, a three-day event hosted by Harbor Freight Tools for Schools where teachers share

best practices and pilot innovate ideas.

- Teachers whose school, district and/or state policy prohibits receipt of the individual portion of prize earnings are eligible to apply on behalf of their school's skilled trades program.
- The application process and the prize are designed to give teachers access to ideas and practices through a network of likeminded exceptional educators and leaders.
- For updates on the prize, follow Harbor Freight Tools for Schools on Facebook, Instagram, Twitter and YouTube.

For more information, visit: harborfreighttoolsforschools.org.



www.indoorcomfortnews.com ICN MAY 2022 23

# **New Products**

### Fujitsu General America STHP



Fujitsu General America, Inc. introduces its new STHP (Splittype Thermal Heat Pump), an inverter-driven heat pump alternative to conventional PTAC units.

Designed as a direct replacement for PTAC units often found in hotels/motels and high-rise residences, Fujitsu's STHP is a combination indoor unit/condensing unit that fits the sleeve of a PTAC, offering higher efficiency, quieter operation, greater comfort and simplified maintenance. The systems provide heating and cooling, even with outdoor temperatures as low as 5°F.

The STHP a combination of a Fujitsu Mid-Tier wall mount indoor unit and a condensing unit available in 9,000 and 12,000 BTU/h capacities.

As the industry's first drop-in replacement alternative to the conventional PTAC unit, the STHP offers up to 21.3 SEER performance and features a sealed and insulated cabinet "sleeve." In comparison with a PTAC, the STHP's part-load and maximum noise levels are reduced by as much as 80 percent.

The STHP is compatible with Fujitsu's BACnet (FJ-AC-BAC-1L) and Modbus (UTY-VMSX) gateways, which allow the product to be easily integrated into most **Building Management Systems** (BMS). The indoor unit is also equipped with external input and output ports, allowing the system to interlock with 3rd party peripheral devices such as ERV, HRV, humidifier, exhaust fan, door switch, occupancy sensor and more. The STHP can also be used in conjunction with the included handheld remote, wired remote control option, the FGLair mobile app and an external backup heater.

The STHP's condensing unit sleeve is available in two depths for various wall thicknesses. The upper sleeve panel is removable from inside the building for maintenance so the condensing unit can be accessed or completely removed from the sleeve.

The system can accommodate line set lengths between 6.5 and 25 feet. This allows the location of the indoor unit to be moved to an interior wall, providing options

based on ideal comfort and airflow.

More information: www.

FuiitsuGeneral.com.

### **Carrier Vertex**

. . . . . . . . .

Carrier, a leader in home comfort solutions, has launched a new evaporator coil with Vertex™ technology, for use in home airconditioning systems, meeting the U.S. Department of Energy's efficiency requirements that take effect in 2023. Vertex<sup>™</sup> technology delivers more controlled and uniform airflow over the coil to improve heat transfer, reduce pressure drop, and increase system efficiency and reliability. Carrier is a part of Carrier Global Corporation (NYSE: CARR), the leading global provider of healthy, safe, sustainable and intelligent building and cold chain solutions.

"Vertex™ technology is a lighter, highly innovative evaporator coil that delivers greater efficiency and durability with the same footprint and comparable heights as the current evaporator coils that it's replacing," said Mark Lampe, Product Marketing, Residential HVAC, Carrier.

Fifteen patents are pending on the new V-shaped indoor coil. Several distinct design features help reduce corrosion and prolong the coil's life:

- The coil's "V" design channels water away from the coil's superheated region to minimize condensate blow-off.
- The unique geometry also reduces condensate sweating by reducing the amount of surface inside the cabinet exposed to conditioned air.
- A lighter, corrosion-resistant aluminum construction increases system efficiency and durability.
- Brazed joints that are positioned at the top of the coil, away from condensate, provide further corrosion protection. Overall, Carrier has reduced the number of manually brazed joints from 13 to just three.

"Vertex™ technology is part of the innovative work that we're doing across our product lines and segments to help customers meet new 2023 efficiency requirements," said Justin Keppy, President, NA



**Carrier Vertex** 

Residential & Light Commercial HVAC Carrier. "The efficient, innovative and sustainable products that we're introducing provide total indoor comfort solutions backed by world-class design, engineering and manufacturing. This work exemplifies our commitment to excellence by reshaping the future of HVAC performance."

Carrier also designed the new coil with Vertex<sup>™</sup> technology for ease of installation. The installation process will remain the same as the current evaporator coils; however, service is improved with a front-mounted TXV and full access to all sides of the coil for cleaning. The evaporator coil with Vertex<sup>™</sup> technology also uses the same 3/8" liquid line inlet and line-set connection as the current coils, is up to 46% lighter weight than current coils and has the same footprint and comparable heights, to help make system replacement fast, easy and hassle-free.

**More information:** https://www.carrier.com/residential/en/

# Samsung DVM S2



DVM S2 is the latest generation of **Samsung** VRF systems boasting industry leading efficiencies and heating and cooling performance. Systems range in capacity from 6 to 40 tons in both heat pump and heat recovery configurations and will support up to 64 indoor units per system.

The DVM S2 features Artificial Intelligence (AI) with Deep Neural Network algorithms to optimize system operation with high- and low-pressure control, defrost cycle activation and operation, and low refrigerant monitoring.

Samsung's AI technology allows the equipment to operate at exact target pressures and temperatures based on the actual application, not generalized targets that are used for any and all applications. This in turn allows the equipment to potentially save energy while providing increased comfort.

The DVM S2 features a simplified chassis design and integral inverter check function that eliminates the need for a separate tool to validate inverter operation for easier serviceability. In addition,

Samsung's new chassis underwent testing using lab equipment simulating an earthquake to ensure operation during seismic activity.

**More information:** www.samsunghvac.com.

# Lochinvar Heat Pumps

. . . . . . . . .



Lochinvar, an industry leader in high-efficiency boiler and water heater technology, announced the launch of 20 new commercial heat pump models, ranging from 25,000 to 250,000 Btu/hr and with modular installation capabilities up to 2 million Btu/hr. The state-of-the-art product line gives specifying engineers, architects and plumbing contractors additional options to meet energy-savings and sustainability goals when bidding on large commercial properties.

As more stringent environmental and energy regulations continue to be adopted in the commercial construction space, Lochinvar's commercial heat pump product line answers the call for both, meeting government mandates to reduce energy use and greenhouse gas emissions from buildings and supporting private company-directed sustainability initiatives.

"Heat pump technology continues to gain momentum in the industry, and we are proud to now offer this product line as a solution to our customers' biggest challenges, while providing their customers with the most environmentally-sound, cost-effective and reliable products for the job," said Mike Lahti, vice president of sales, marketing and business development at Lochinvar. "As an industry leader, we feel this product line is a natural fit for our portfolio and marks another big step toward our continued tradition of excellence in sustainability and innovation."

Heat pump water heaters are highly efficient, transferring heat, instead of creating it. Unlike typical HVAC heat pump systems, heat pump water heaters are specially designed to provide hot water using atmospheric heat (air source) or geothermal/waste heat (water source). The air source models cool and dehumidify the surrounding ambient air, cutting down on air conditioning usage and costs. The water source units absorb heat from water sources, including return

chiller water, process and ground-water.

Designed for indoor or outdoor use, heat pump water heaters work in conjunction with storage tanks and can be tailored to meet specific application requirements. Lochinvar's broad line of glasslined domestic water storage tanks offers engineers and contractors a wide-variety of solutions to integrate with most systems, offering turnkey solutions.

The Lochinvar commercial heat pump line offers six air source, six water source and eight modular water source units. The air and water source models range in capacity from 25,000 to 250,000 Btu/hr and generate 50 to 500 gallons of hot water per hour. Modular water source units range in capacity from 270,000 to 2 million Btu/hr and generate 323 to 2,584 gallons of hot water per hour. All units feature a maximum 160-degree water temperature and an ambient operating range of 40 to 120 degrees.

**More information:** www.Lochinvar.com.

# Nu-Calgon Soak-N-Solv



Nu-Calgon has launched a new solvent-based restoring solution specially formulated for HVACR components. Called Soak-N-Solv™, the ready-to-use compound effectively restores internal assemblies of TEVs, solenoid valves, PRVs and other refrigerant flow devices

Soak-N-Solv can also be used to restore metal parts of a compressor rebuild, fan blades, flange assemblies, fasteners and other HVACR related components. It dissolves contaminants in seconds and dries at a controlled rate, leaving no residue.

Soak-N-Solv is non-corrosive to metals and its formula is compliant in all 50 US states.

For over 70 years, Nu-Calgon has been providing quality specialty products for the HVACR market. The company's complete line of products includes coil cleaners, descalers and refrigeration oils, as well as products for indoor air quality, water treatment, ice machine maintenance and other applications.

**More information:** www.nucalgon.com.

# **Legal Lines**

# SB 727: Direct Contractors' Liability Expanded to Include Damages for Private Works of Improvement

From the Law Offices of Atkinson, Andelson, Loya, Ruud and Romo

With the enactment of Senate Bill ("S.B.") 727 into law, a direct contractor's liability for unpaid wages, fringe, or other benefit payments or contributions, including interest, owed by a subcontractor on account of the performance of labor is expanded to include penalties and liquidated damages for contracts entered into for private works of improvement on or after January 1, 2022.

S.B. 727 amends Labor Code Section 218.7 and provides that it shall only apply to contracts entered into between January 1, 2018 and December 31, 2021. Contracts entered into on or after January 1, 2022 will be subject to the new Labor Code Section

Under Section 218.8, important provisions include:

- Contractors are required to monitor payments by the subcontractor of wage, fringe or other benefit payment or contribution to the employees or the labor trust fund by periodically reviewing subcontractor payroll records.
- Upon becoming aware of a subcontractor's failure to pay wages, fringe, or other benefit payments or contributions, the contractor is required to diligently take corrective action to halt or rectify

the failure, including, but not limited to, retaining sufficient funds to be paid to the subcontractor for work performed on the private construction project.

- Prior to making final payment to the subcontractor for work performed, the contractor must obtain a signed affidavit from the subcontractor that the subcontractor has paid the wages and benefits due the employees or the labor trust fund for all work performed.
- The Labor Commissioner may enforce against a direct contractor the liability for unpaid wages, liquidated damages, interest, and penalties created by subdivision (a) pursuant to Section 98 or 1197.1, or through a civil action.

In order for a direct contractor to meet these requirements, Section 218.8 requires subcontractors provide payroll records for its employees upon request and provide information regarding the project name, anticipated start date, duration, and estimated journeymen and apprentice hours, and contact information for its employees on the project. Section 218.8 also provides that direct contractors may withhold as "disputed" all sums owed if a subcontractor does not timely provide the information requested and until that information is provided.

Construction projects often involve many subcontractors and individuals providing a variety of services or equipment. This new law is significant because it will undoubtedly increase costs by requiring contractors to incorporate new processes to periodically surveil subcontractors' payroll records and develop procedures for taking corrective action to rectify a subcontractor's malfeasance. Therefore, it is imperative for contractors to evaluate their current business operations and consider how they can adapt to the requirements of this new

Contractors are encouraged to closely vet subcontractors when evaluating bids for private construction contracts. It is important for contractors to inquire into the terms of a private works contract and determine whether releases from the laborers are secured. Contractors may also want to demand proof that wages and benefits have been paid to the subcontractor's employees before issuing payment on a private construction project. Furthermore, Contractors may request extensive documentation pertaining to the subcontractor's finances on the project, including credit reports, and require a 10% retention (or more) if there are any doubts regarding a subcontractor's diligence in timely paying all wages and benefits. In extreme circumstances, contractors may even consider securing a payment bond and ensure that final payments are not issued until proof is provided that all employees have been paid by including this language as a requirement in construction contracts.

It will be crucial for contractors to work with trusted subcontractors who are cognizant of this new

law and can demonstrate they have integrated procedures for ensuring proper payments of wage, fringe, or other benefit payment or contributions to the employees. Despite the requirements of the new law, contractors can protect themselves from exposure and avoid liability by planning ahead and integrating new processes into their business operations.

This AALRR publication is intended for informational purposes only and should not be relied upon in reaching a conclusion in a particular area of law. Applicability of the legal principles discussed may differ substantially in individual situations. Receipt of this or any other AALRR publication does not create an attorney-client relationship. The Firm is not responsible for inadvertent errors that may occur in the publishing process.

# **HARDI Opposes Bill to Ban Sale of** R410A, Other Common Refrigerants

California State Senator Nancy Skinner (D-09) has introduced SB-1206 that would ban the sale of all HFC refrigerants over 1,400 GWP starting on January 1, 2025 and over 750 GWP after January 1, 2030. This would ban the sale of R-410A, R-404A, R-407C, R-134a and many other HFC refrigerants used in equipment today. Without the ability to sell refrigerants to service technicians, something as simple as a leak at a refrigerant connection could force a homeowner to replace an entire HVAC unit. Nearly 6 million units in California with usable life left could face replacement due to easily repairable problems but will need to be replaced because of this legislation. This will mean millions of California residents will face several thousand dollar replacements instead of simple hundred dollar repairs.

This legislation is on top of regulations already put in place by the California Air Resources Board and the U.S. Environmental Protection Agency that will phase-down the use of HFC refrigerants at a pace that will not force equipment changeouts by consumers. While many climate activists have latched on to short-lived climate pollutants like HFCs in recent years, the industry, in partnership with international environmental advocates, has developed a worldwide reduction of these chemicals; state-level action will only hurt California's residents, not meaningfully reduce the worldwide release of these

HARDI is fully opposed to SB-1206 because of the undue burden it would place on California residents, and we are encouraging all HARDI members with locations in California to reach out to the Senate Environmental Quality Committee and let them know that SB-1206 is had for California residents







erro Truck Center



# If We Don't Have It... We'll Build It for You

**Just ask for Commercial Trucks** 877.278.0333 or 626.932.5652

Sierra Truck Center | www.SierraTruckCenter.com 721 East Central Avenue, Monrovia, CA



www.indoorcomfortnews.com ICN MAY 2022 25

# **Technical Training**

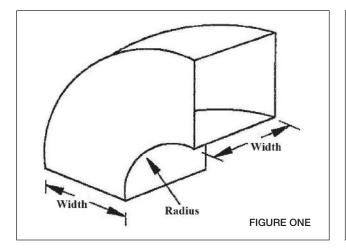
# Growing Green Technicians Part 151: Friction, Pressure Losses in Supply Duct Systems

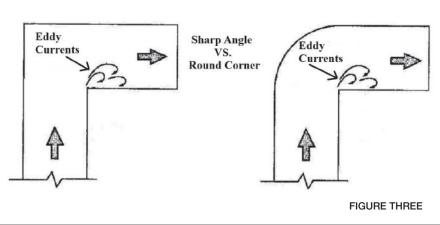
By Jim Johnson Contributing Editor

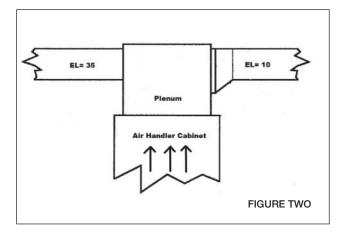
In the last segment in this series our discussion focused on the fundamental concept of TEL (Total Effective Length) in a supply duct system and the need to deliver the same volume and velocity of air at the end of a duct run that we started out with at the beginning. Without this correct level of air flow, a system simply can't function efficiently because of the pressure losses that result due to excessive friction.

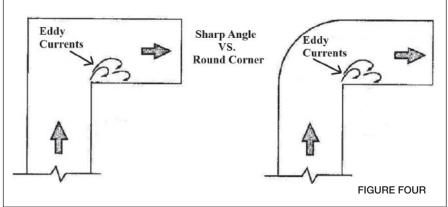
The key term to keep in mind here is excessive. It's a given that there will be a certain degree of friction in any supply duct system since air flow has to change direction and ultimately flow through fittings that enable the distribution of air into the individual rooms within the conditioned space. One example of friction occurring when a fitting is employed is shown in **Figure One**, in this case, to accomplish a change in the direction of air flow.

Here, we're showing a standard 90-degree turn ELL, that, depending on its size (width, height, and radius of the turn of the fitting) will have an assigned equivalent length. And fittings of various designs that fundamentally per-









form the same function can have a different EL, depending on their specific design. **Figure Two** shows two different designs, one of which is more efficient than the other.

In this illustration of an up-flow air handler, we can see the differ-

ent TEL of two different types of fittings. From a simple, visual troubleshooting/evaluation perspective, technicians can gain insight into what may be an issue regarding the proper flow of air through the supply duct system resulting in customer complaints about the performance of the equipment. If the fitting on the left that has an effective length of 35 ft. has been employed rather than the fitting on the right that has an effective length of only 10 ft., it could be

one of the factors affecting the overall air flow into the individual rooms of the conditioned space.

And another perspective to consider regarding a 90-degree fit-

Continued on Page 27

# **Troubleshooting**

# A 9-Year-Old Split System That's Not Cooling

By Jim Johnson Contributing Editor

Note: Before we get into the details of this particular situation, we want to point out that there are actually three questions to answer.... two of them regarding overall troubleshooting procedures, and a third one regarding the necessary repair.

In this month's troubleshooting problem, the equipment is a split system that's approximately 9 years old, consisting of a gas furnace that provides heat in the winter, and employs a condensing unit and "A" coil to provide summer cooling. The information you get from the dispatcher is that the customer's complaint is that the system is not cooling and the specific information they provide is that the unit is "blowing warm air".

Which brings us to the first question about this problem:
What are two components located

in the furnace assembly that can be eliminated from consideration as the possible source of the problem?

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

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

After turning off the disconnect switch and removing the access cover, you find that the compressor is hot to the touch, indicating it is attempting to start. Based on that observation, you disconnect the power supply, all the appropriate wiring when necessary, and,

with a digital meter, check the start components shown in **Figure One**. And you get the following results:

1. At terminals SC, you read the rating shown on the component case.

2. At terminals RC, you read the rating shown on the component case.

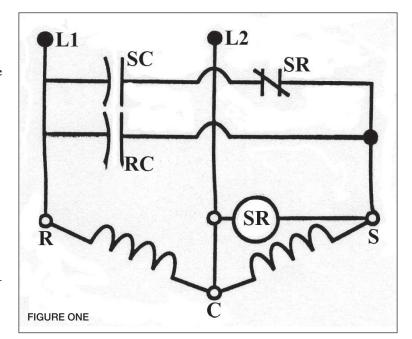
3. At the SR coil terminals, infinity.

4. At the SR switch terminals, a fraction of an ohm

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

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

In your email subject line please include "Troubleshooting Answer"



and indicate which month the question you are responding to was published.

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

### Answer to Last Month

The next step to take is to replace the thermostatic expansion valve.

The winner is:

James Williams
Torrance, Calif.

26 ICN MAY 2022 www.indoorcomfortnews.com

# **Indoor People**



STEPHEN O'BRIEN



**EDDIE GOODWIN** 

A. O. Smith Corporation announced that **Eddie Goodwin**, senior vice president, president of Lochinvar, will retire July 1, and **Stephen O'Brien**, chief operating officer, has been named the successor.

'Since joining the company over 40 years ago, Eddie's vast experience and steadfast leadership has helped shape Lochinvar into the industry-leading, high efficiency boiler and water heater manufacturer it is today," said Kevin Wheeler, chairman, president and CEO. "He has built a strong team committed to designing, manufacturing and selling high quality, innovative products that meet our customer's needs. We thank him for his vision and commitment to our customers, our employees and the A. O. Smith values over the past four decades."

In his new role, O'Brien will build on the strong foundation Goodwin and his team have established, by implementing the strategic vision for the organization and further expanding Lochinvar's innovative product lines. O'Brien has served as chief operating officer for Lochinvar since August of 2021 and is uniquely qualified to assume the role of president going forward. O'Brien joined Lochinvar from Mitsubishi Electric Trane HVAC US (METUS) and prior to that, worked for A. O. Smith Electrical Products Company for 14 years before the company was sold to Regal Beloit Corporation. He holds an MBA from the University of Dayton in Ohio and a bachelor's degree in mathematics from State University of New York at Potsdam.

"With his extensive experience in the HVAC industry, his strong leadership skills and focus on customer satisfaction, Steve is the ideal person to lead our Lochinvar business unit going forward," Wheeler added. "I am confident the transition will be seamless, and Steve's extensive background and business development skills will further strengthen Lochinvar's channel partnerships and our presence in the market."

• • • • • • • •



**GERRY WAGNER** 

Bathica has named **Gerry Wagner**, vice president of business development for the TOSOT brand of HVAC equipment in Canada. Wagner has 41 years in the HVACR industry working in manufacturing, contracting, and training. Wagner will be responsible for developing and implement-

ing comprehensive product training curriculum as well as multi-media training materials for TOSOT dealers and distributors. Wagner will have influence in many aspects of the TOSOT product such as marketing, product offering, distributor, dealer, and manufacturers representative network development.

. . . . . . . . .

Shurtape Technologies LLC announced **Vuk Trivanovic** as CEO of the company's Industrial and Engineered Solutions (ESG) Groups. He will expand his role and responsibilities as CEO to encompass the full scope of Shurtape's global business, now including its Ohio-based Consumer & Craftsman (C&C) Group. Shurtape's C&C Group markets DIY (Do-It-Yourself), EIY (Express-It-Yourself), and home and office products under the Duck®, T-Rex®, FrogTape®, Painter's Mate®, and Shurtape® brands. The leadership



VUK TRIVANOVIC

transition comes as John Kahl, CEO of Shurtape's C&C Group, announced his retirement. Kahl and Trivanovic, who earlier this year joined the board of directors of Shurtape's parent company, STM Industries, will both continue to serve in that capacity.

Trivanovic joined the company in 2015 as chief operating officer, a role that allowed him to become familiar with all aspects of Shurtape's business and the various markets served by the company. In February 2020, he assumed overall leadership of the Industrial and ESG Groups.

"Shurtape has thrived for generations by embracing change and by developing and promoting individuals who demonstrate outstanding leadership and vision," said Stephen Shuford, vice chairman of STM Industries. "Over the course of his six-year career at the company, Vuk has steadily earned the confidence and respect of the board, his co-workers, our customers, supply chain partners, and local community leaders. We are all eager to lend our support as he captains the next leg of Shurtape's continuing growth journey."

"I am humbled and honored to assume the role of CEO of the Shurtape Group of Companies

Continued on Page 30



Designed with a powerful 1.25 hp brushless DC motor and twin-cylinder compressor, the **YELLOW JACKET®** *Turbo* **Recover™ Recovery Machine** provides fast refrigerant recovery. It features a low-pressure switch for automatic shut-off when recovery is

- complete and a purge function to prevent cross contamination.

   Compatible with Class III, IV and V refrigerants including 410A
- Designed for use with A2L systems
- Simple user interface with a single control valve and easy-to-read high/low gauges
- Lightweight design and shoulder strap ensures easy carrying and transport

Connect at yellowjacket.com to learn more. In of



# Technical Training Continued from Page 26

ting is its specific design. **Figure Three** shows two styles that will have two different effective lengths.

When considering a sharp angle fitting vs. a round corner design, while both will create some turbulence/pressure drop in the air flow pattern (known as Eddy Currents), the round design will have a lower EL than the sharp angle fitting.

And, going beyond considering the specific design of a 90-degree fitting, another factor technicians need to consider is whether or not splitters ... also known as turning vanes ... (see **Figure Four**) are present in the fitting.

When technicians consider the overall total effective length of a supply duct system, along with a focus on individual fittings that could be the source of excessive friction and pressure loss, they are taking a green approach to servicing equipment, ensuring that it is operating as efficiently as possible.

www.indoorcomfortnews.com ICN MAY 2022 27

# INSTITUTE OF HEATING AND AIR CONDITOR AN

CALIFORNIA QUALITY INSTALLATION, QUALITY MAINTENANCE AND QUALITY S

### **SOCALGAS, DOWNEY**

# MAY

# **System Performance Module**

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

Mon., May 2 - Part 1

Tues., May 3 – Part 2

Mon., May 9 - Part 3

Tues., May 10 - Part 4

# JUNE

### **Air Distribution Module**

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

Mon., June 6 - Part 1

Tues., June 7 – Part 2

Mon., June 13 - Part 3

Tues., June 14 - Part 4

# **J**ULY

## **Chiller Module**

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

Tues., July 5 - Part 1

Tues., July 12 - Part 2

# **A**UGUST

## **Commercial Cooling Tower Module**

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

Tues., Aug. 2 – Part 1

Tues., Aug. 9 – Part 2

### **S**EPTEMBER

## NATE CORE & Gas Heating Training

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

Wed., Sept. 7 - Part 1

Thurs., Sept. 8 – Part 2

Wed., Sept. 14 – Part 3

Thurs., Sept. 15 – Part 4

# **O**CTOBER

# NATE AC/HP Refrigeration & Air Distribution Training

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

Wed., Oct. 5 – Part 1

Thurs., Oct. 6 – Part 2

Wed., Oct. 12 - Part 3

Thurs., Oct. 13 – Part 4

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

# SOUTHERN CALIFORNIA EDISON, IRWINDALE

# MAY

### **Chiller Module**

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

Wed., May 4 - Part 1

Thurs., May 5 – Part 2

### **Commercial Cooling Tower Module**

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

Wed., May 11 - Part 1

Thurs., May 12 - Part 2

# JUNE

### **System Performance Module**

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

Wed., June 1 - Part 1

Thurs., June 2 - Part 2

Wed., June 8 - Part 3

Thurs., June 9 – Part 4

# **S**EPTEMBER

### **Air Distribution Module**

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

Wed., Sept. 21 – Part 1

Thurs., Sept. 22 – Part 2

Wed., Sept. 28 – Part 3

Thurs., Sept. 29 – Part 4

# **O**CTOBER

### **AC/HP Refrigeration Module**

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

Wed., Oct. 19 – Part 1

Thurs., Oct. 20 – Part 2

Wed., Oct. 26 - Part 3

Thurs., Oct. 27 – Part 4

# **N**ovember

# **System Diagnostics Module**

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

Wed., Nov. 9 - Part 1

Thurs., Nov. 10 – Part 2

Wed., Nov. 16 – Part 3

Thurs., Nov. 17 – Part 4

# SOUTHERN CALIFORNIA EDISON, TULARE

# MAY

## **System Diagnostics Module**

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

Wed., May 11 - Part 1

Thurs., May 12 - Part 2

Wed., May 18 – Part 3

Thurs., May 19 - Part 4

# **J**UNE

### **Electrical Module**

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

Tues., June 7 - Part 1

Wed., June 8 – Part 2

Tues., June 14 – Part 3 Wed., June 15 – Part 4

# **S**EPTEMBER

### **System Performance Module**

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

Tues., Sept. 13 – Part 1

Wed., Sept. 14 – Part 2

Tues., Sept. 20 – Part 3

Wed., Sept. 21 – Part 4

# **O**CTOBER

# NATE CORE & Gas Heating Training

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

Wed., Oct. 12 - Part 1

Thurs., Oct. 13 – Part 2

Wed., Oct. 19 – Part 3

Thurs., Oct. 20 – Part 4

# **N**OVEMBER

# NATE AC/HP Refrigeration & Air Distribution Training

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

Wed., Nov. 2 - Part 1

Thurs., Nov. 3 – Part 2

Wed., Nov. 9 – Part 3

Thurs., Nov. 10 - Part 4

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

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 Being Offe

Classes begin at 6:00 PM Pacific Time and class Register at www.ihaci.or

# LASS SCHEDULE

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

# PACIFIC GAS AND ELECTRIC COMPANY, STOCKTON

# <u>May</u>

## **AC/HP Refrigeration Module**

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

Wed., May 25 - Part 1

Thurs., May 26 – Part 2

# **JUNE**

### **AC/HP Refrigeration Module**

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

Wed., June 1 - Part 3

Thurs., June 2 - Part 4

### **Air Distribution Module**

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

Wed., June 22 – Part 1

Thurs., June 23 - Part 2

Wed., June 29 – Part 3

Thurs., June 30 - Part 4

# **A**UGUST

### **System Diagnostics Module**

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

Wed., Aug 31 – Part 1

# **S**EPTEMBER

## **System Diagnostics Module**

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

Thurs., Sept. 1 – Part 2

Wed., Sept. 7 – Part 3

Thurs., Sept. 8 – Part 4

# **O**CTOBER

### NATE CORE & Gas Heating Training

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

Mon., Oct. 10 - Part 1

Tues., Oct. 11 – Part 2

Mon., Oct. 17 – Part 3

Tues., Oct. 18 – Part 4

# **N**ovember

# NATE AC/HP Refrigeration & Air Distribution Training

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

Mon., Nov. 7 – Part 1

Tues., Nov. 8 – Part 2

Tues., Nov. 15 – Part 3

Wed., Nov. 16 – Part 4

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

### **SAN DIEGO GAS & ELECTRIC**

# MAY

### **AC & HP Refrigeration Module**

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

Wed., May 18 - Part 1

Thurs., May 19 - Part 2

Wed., May 25 – Part 3

Thurs., May 26 - Part 4

# JUNE

### **Air Distribution Module**

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

Wed., June 15 - Part 1

Thurs., June 16 – Part 2

Wed., June 22 - Part 3

Thurs., June 23 – Part 4

# JULY

### **System Diagnostics Module**

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

Wed., July 6 – Part 1

Thurs., July 7 – Part 2

Wed., July 13 – Part 3

Thurs., July 14 – Part 4

# **A**UGUST

### **System Performance Module**

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

Wed., Aug. 3 – Part 1

Thurs., Aug. 4 – Part 2

Wed., Aug. 10 – Part 3

Thurs., Aug. 11 – Part 4

# <u>September</u>

### **Chiller Module**

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

Tues., Sept. 6 – Part 1

Tues., Sept. 13 – Part 2

### **Commercial Cooling Tower Module**

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

Tues., Sept. 20 – Part 1

Tues., Sept. 27 – Part 2

# **O**CTOBER

### **Boiler Module**

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

Tues., Oct. 4 - Part 1

Tues., Oct. 11 – Part 2

# **Commercial Refrigeration Module**

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

Tues., Oct. 18 - Part 1

Tues., Oct. 25 – Part 2

# **N**OVEMBER

## NATE CORE & Gas Heating Training

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

Mon., Nov. 21 – Part 1

Tues., Nov. 22 - Part 2

Mon., Nov. 28 - Part 3

Tues., Nov. 29 - Part 4

# **D**ECEMBER

# NATE AC/HP Refrigeration & Air Distribution Training

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

Mon., Dec. 5 – Part 1

Tues., Dec. 6 – Part 2

Mon., Dec. 12 – Part 3

Tues., Dec. 13 – Part 4

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



# red as Webinars

format is subject to change g (Training)

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









# **Indoor People**

### **Continued from Page 27**

and wish to thank John for his superlative leadership and selfless commitment to the business over the course of his 36-year career," said Trivanovic. "The success of Shurtape's Consumer & Craftsman business has always been rooted in its embrace of innovation and imagination, and that will never cease to be the case. My goal is simply to build upon that rich legacy by helping Shurtape continue to develop better, easier solutions for everyday household and workforce tasks."

While Trivanovic will be based in Hickory, NC, Shurtape's C&C Group will maintain its operations in Avon, Ohio, where the company recently extended the lease on its facility until 2031.

• • • • • • • •



CHARLES KEEFER

KAI Design announced the hiring of **Charles Keefer**, AIA, NCARB, as a Senior Project Manager at its St. Louis office. With more than 20 years of experience in both architecture and project management, Keefer has been exposed throughout his career to a wide range of projects, clients, environments, and challenges.

In his most recent role as Director of Architecture for Fisher Arnold in Memphis, Tennessee, Keefer managed the design team on two Shelby County elementary schools, one of which won the 2021 Memphis Business Journal's Project of the Year.

For over five years, Keefer had the opportunity to practice architecture in Philadelphia, working on historic restoration projects as well as extensive adaptive reuse projects focused on the community's redevelopment.

"Charles has quickly proven to be a wonderful addition to our KAI Architecture and Engineering practice," said KAI Managing Partner Brad Simmons, FAIA. "He is an experienced business leader with a passion for design excellence. Charles's past experience brings a diverse design portfolio, geographic knowledge and skilled project management. His cultural fit is outstanding and we are

enthusiastic about his impact at KAL"

Keefer has a Master of Business Administration from the University of Charleston in West Virginia and a Bachelor of Architecture from Virginia Tech. He has completed the Intern Development Program and is certified with the National Council of Architectural Registration Boards (NCARB). He is also a licensed architect in multiple states including Missouri, Texas, Florida, Pennsylvania, West Virginia, and New York.

• • • • • • • •

Dale Clark, a Canal Winchester, Ohio, resident, was hired as the Occupational Safety and Health Administration (OSHA) specialist for the International Training Institute (ITI), the education arm of the unionized sheet metal industry. The position was created to oversee health and safety classes for members of the International Association of Sheet Metal, Air, Rail and Transportation (SMART) workers.

Clark comes to the ITI from Sheet Metal Workers Local 24 in Columbus, Ohio, where he taught OSHA classes and also helped to run the second-chance outreach program, which introduced the trades to people seeking a new start. He also served as safety manager for Limbach Mechanical.

As OSHA specialist, he is responsible for all aspects of the different OSHA classes available through the ITI, from setup, paperwork, and approval to teaching.

"You still have to bring the same energy that you would in person," Clark said, describing how he keeps students engaged remotely without the one-on-one experience. "It's still a brotherhood and a sisterhood whether you're there in person or not."

Clark said he trains on two different levels now – teaching members about OSHA guidelines while also helping instructors navigate online platforms. His main goal is to send these trainers back to their local training centers with a better understanding of health and safety as well as how to teach. Training in health and safety means everything



DALE CLARK

from mental health to safeguarding your future quality of life, he

More than 14,000 apprentices are registered at 148 training facilities across the United States and Canada. The ITI is jointly sponsored by the International Association of Sheet Metal, Air, Rail and Transportation (SMART) workers and the Sheet Metal and Air Conditioning Contractors' National Association (SMACNA).

• • • • • • •



JULIANNE TURK

Dakota Supply Group (DSG) has appointed **Julianne Turk** as its chief financial officer (CFO). Turk will lead DSG's financial teams and oversee all the company's financial processes and strategy development. She will be based out of DSG's Plymouth, Minnesota, office and will be part of DSG's executive team.

Before joining DSG, Turk served as CFO of COKeM International for the last seven years. She brings over 30 years of broad finance and senior executive experience coupled with a track record in developing and executing strategy.

"We are excited that Julianne has joined DSG as a fellow employee-owner," said Paul Kennedy, DSG's CEO. "With her diverse experience, passion for team development, and vision of maximizing the finance/business partnership, I am sure that she will have an immediate impact on our organization's growth."

• • • • • • • •

American Supply Association Director of Codes and Standards **Jim Kendzel**, MPH, CAE, recently was appointed as a voting member to the new International Association of Plumbing and Mechanical Officials (IAPMO) Technical Subcommittee Z1324.

The scope of IAPMO Z1324 covers alternate water source systems for multi-family, residential, and commercial use intended to process water from alternate water sources such as greywater, rainwater, storm water, air-conditioning condensate, cooling tower makeup, vehicle wash and other nonpotable reuse applications not specifically listed – for use in subsurface and/



JIM KENDZEL

or surface irrigation, and toilet/ urinal flushing applications. The Z1324 standard will be developed by this new technical subcommittee.

"The growing use of alternate water source technologies will have an increasing impact on the plumbing and PVF marketplace, and the products our members deliver to that marketplace," Kendzel said. "It is critical for ASA to represent its members and the plumbing and PVF supply chains as new standard activities are initiated related to alternate water system technology."

• • • • • • • •

Heating, Air-conditioning & Refrigeration Distributors International (HARDI) announced the hiring of Zachary Perge as the organization's first vice president of distribution strategies. Perge comes to HARDI from Deloitte Consulting, where he was senior consultant, consumer M&A division. Perge was the integration lead for a \$38 billion merger of two semiconductor companies, developed a \$30-\$50 million cost reduction program for a Fortune 500 consumer company, and generated over \$46 million in new projects for Deloitte during his time there. Prior to Deloitte, Perge led trade marketing for Hain Celestial, a global consumer products company with 20 retail brands, and was the channel and customer marketing manager for Unilever.

Since implementing its current strategic plan in 2019, HARDI has grown its content and market intelligence capabilities resulting in several successful research projects for HARDI members and HARDI's Education & Research



ZACHARY PERGE

Foundation. In his new role as vice president of distribution strategies, Perge and his consulting experience will oversee growing these capabilities and further advancing HARDI's abilities to help distributor and supplier manufacturer members enhance their distribution performance, profitability, and capabilities.

"It's rare for trade associations to add talent of Zach's caliber to their teams and I'm thankful for the vision and boldness of HARDI's Board of Directors and professional team to not only produce and implement such a tremendous strategic plan, but also commit and invest so fully to its success in serving and advancing our members' businesses," said HARDI CEO, Talbot Gee. "I'm excited to see how Zach and our Team Leader of Market Intelligence Tim Fisher team up to raise the bar in the quality and value of the content we provide our members, including HARDI's ability to help distributor and supplier members alike solve their most difficult challenges. This is yet another expression of our laser focus on our mission of making wholesale distributors the channel of choice for HVACR manufacturers and contractors."

"I look forward to contributing to the best-in-class services that HARDI offers to its members. I am committed to helping them achieve their goals, conquering the business challenges of today, and working with members to exceed the expectations of those who rely on them," said Perge.

• • • • • • • •



JAY PITTAS

Tecumseh Products Company announced that **Jay Pittas** has been appointed CEO and two proven industry leaders have taken new commercial management roles. The newly appointed management team includes Doug Murdock, president of the Americas, and Ricardo Maciel, president of EMEA/Asia. Ernani Nunes continues to serve as the SVP of Global Sales & Engineering.

Most recently, Pittas has served

**Continued on Page 31** 

# For Sale

### **Retiring HVAC Business**

After 30 + years in business. Selling 3 business phone #s that have been with the company and marketed to bring a lot of new business. \$10,000 OBO. Call Becky or Bill 949-254-4072.





ADVERTISE IN
INDOOR
COMFORT
NEWS
CALL TODAY!
(818) 551-1555

### **NEW IHACI MEMBERS**

- Harvey's Heating and Air, Orange, CA
- New Air, Inc., Santa Clarita, CA
- Spectrum Mechanical, Inc., Irvine, CA
- Francisco Sevilla, Los Angeles, CA
- Christopher Walsh, Tujunga, CA

# **Indoor People**

**Continued from Page 30** 

as the Chairman of Tecumseh's Board of Directors since April 2020, and thus has already been an integral part of Tecumseh's leadership team. Pittas previously served as the president and CEO of Remy International, a supplier of automotive parts for passenger and commercial vehicles. Prior to this position, he served as president of the Wolverine Specialty Materials business, which supplied coated metals for automotive and electronic applications. He has also held international and managerial positions with Honeywell, UOP, and ARI Technologies.

To further accelerate commercial growth, operational excellence, and improved customer service, Pittas has appointed three proven industry leaders to commercial management positions. Doug Murdock, who has served Tecumseh as the president and CEO for over five years, will assume the new role of president of Americas. Ricardo Maciel, a former CEO of SECOP, assumes the president of EMEA/Asia. Ernani Nunes, a former executive from Embraco, will continue to serve as the SVP of Global Sales & Engineering.

"As we all work through these most challenging times, Tecumseh is taking every step possible to further strengthen our Leadership Team, and in turn strengthen the service we deliver to our customers. The steps we're announcing today speaks to that commitment. We're thrilled to have Doug and Ricardo and Ernani take on these key leadership positions, and help us drive forward in our continued transformation at Tecumseh," said Pittas.

• • • • • • • •



PATRICK FLAHERTY

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

"Pat will be our territory sales manager for the Boston Metro area," said Walter Morris Vice President, Patrick McCarthy. "He brings extensive experience as a manufacturer's representative as well as holding key sales positions with Viega industrial piping products and Burnham boilers."

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

### ----

**Advertiser Index** 

ADVERTISERICN	PAGE
Baker Distributing Company	23
Dial Manufacturing	11
Ferguson HVAC - Day & Night	2
Ferguson HVAC - TRANE	3
Fieldpiece Instruments	12
Howard Industries	32
IHACI Membership Ad	22
Mitsubishi Electric1	6, 17
Olimpia Splendid USA	5
Pacific Gas & Electric (PG&E)	13
Pro Source	8
R.E. Michel Company	21
San Diego Gas & Electric (SDG&E)	15
Service Roundtable	6
Sierra Chevrolet	25
So Cal Gas	7
USACD	9, 19
Vent Cap Systems	18
Yellow Jacket Products	27

### IHACI OFFICERS

The Institute of Heating and Air Conditioning Industries publishes INDOOR COMFORT NEWS

**Dean Gilford,** President Kilowatt Heating, A/C & Electric

**Steve Adams,** Vice President Ferguson HVAC

Mark Ramirez, Past-President Comfort Climate Control

### **BOARD OF DIRECTORS**

Mitch Bailey Bailey's Heating & Air, Inc.

Jim Batts

Lifetime Board Member

Harvey Bringas Southern California Gas Company

Lawrence Castillo

Brody-Pennell Heating & Air Condition

**Steve Clinton**Southern California Edison

Joseph Le LADWP

Lyman Lockwood George Haney & Son, Inc.

**Charlotte Loomis**Fieldpiece Instruments

Eugene Silberstein ESCO Group

**Bob Wiseman** Canoga Park Heating & Air Conditioning

**Penny Yonan-Padgett**US Air Conditioning Distributors

### INDOOR COMFORT NEWS

Gilbert Rivera

Editor

Carlos Ruiz
Executive Director

Karina Ball

Sales Account Executive

**Ted Rieger** Northern California Correspondent

**Jim Johnson**Contributing Editor

Rick Torres / Calavera Graphics
Pre-Press Consultant

Lisa Marie De Roma Mary Ann Garcia

Program Coordinators

Ari ManSonHing

Ari ManSonHing
Operations / Accounting Manager

INDOOR COMFORT NEWS is not responsible for unsolicited materials. Although every precaution is taken to ensure the accuracy of statements, IHACI assumes no responsibility.

Postmaster: Send address changes to INDOOR COMFORT NEWS 454 W. Broadway, Glendale, CA 91204 Phone (818) 551-1555



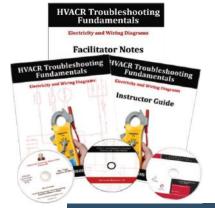
# ADVANCE YOUR TECHNICIAN'S ELECTRICAL SKILLS WITH THIS TRAINING BUNDLE!

Check out our
HVACR Troubleshooting Fundamentals: Electricity & Wiring
Diagrams Training Package

for HVACR Educators, Service Managers and Lead Technicians

## This training package includes:

- One (1) Student Textbook
- One (1) Instructor Guide, print copy with answers to student workbook pages
- One (1) Instructor Guide PowerPoint with answers to student workbook pages and End-of-Course Exam
- One (1) PowerPoint: HVACR Troubleshooting Fundamentals: 15 Electrical Troubleshooting Scenarios
- One (1) DVD/Video: Electrical Fundamentals for HVACR Technicians (Run Time: 120 Minutes)
- One (1) DVD/Video: *Proper Use of Test Instruments* (Run Time: 60 Minutes)
- One (1) bonus Facilitator's Guide that will provide any instructor or trainer a detailed breakdown on utilizing all the resources in this package in a training program.



A \$270 value for **\$215.00** (Includes Shipping & Handling)

Purchasing this combined resource package saves you 20%!

Order today at https://techtrainassoc.com or call 520-625-6847

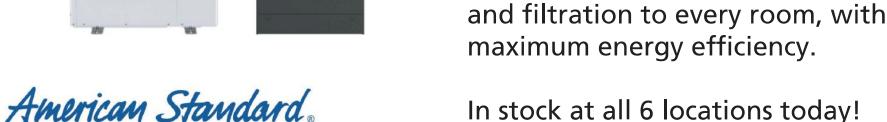


Technical Training Associates
Skill Development Through Specialized Training



www.indoorcomfortnews.com







Anaheim 600 E Cerritos Ave, Anaheim, CA 92805 (714) 991-4441 Culver City 8855 Washington Blvd. Culver City, CA 90232 (310) 837-9100 Downtown LA 1514 Maple Ave. Los Angeles, CA 90015 (213) 747-5121



Escondido 960 S Andreasen Drive #C Escondido, CA 92029 (760) 743-7300

Riverside 2000 Spruce St #2649 Riverside, CA 92507 (951) 784-8800 Van Nuys 7500 Van Nuys Blvd, Van Nuys, CA 91405 (818) 782-3600