

# INDOOR COMFORT

SEPTEMBER 2021

THE VOICE OF THE INDUSTRY  
**NEWS**

www.indoorcomfortnews.com

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

**IHACI**

**IHACI'S 41st Annual HVAC/R/SM — Performance Contracting Product and Equipment Trade Show**

## HONORING OUR **HVAC** ESSENTIAL WORKERS

Tuesday, November 16, 2021  
Pasadena Convention Center  
11:00 a.m. - 7:00 p.m.

See Page 31 for  
list of exhibitors!



## Inside

**DEPARTMENTS**

**Industry News 4**

**Industry Education 22**

**Technical Training 24**

**Classifieds 35**



**IHACI**

### 2021 Training Classes

Keep your skills up-to-date  
by enrolling now! See Page 32  
for more details or visit  
[http://www.ihaci.org/  
education-training/](http://www.ihaci.org/education-training/)

PSRST STD  
U.S. POSTAGE  
**PAID**  
LITTLE ROCK, AR  
PERMIT NO. 1884

CHANGE SERVICE REQUESTED

Glendale, CA 91204  
454 W. Broadway

**INDOOR COMFORT NEWS**

# ELECTRIFICATION IS HERE TO STAY



We have the winning Residential Heat Pump lineup.  
Efficiency ratings from 14 to 20 SEER. Sound ratings as low as 48 dBA.  
Single Stage to 750 Stages of Comfort.

## RunTru® Heat Pump Spotlight

### A4HP4

- Efficiency 14 SEER+
- Sound levels of 74-76 dBA
- All-aluminum coils
- Scroll compressors
- Quiet operation (76 dB)
- Smaller size options for tighter spaces
- Pre-painted steel cabinet and base pan
- Assembled in Tyler, TX



### NOT ALL TOOLS ARE METAL

Check out our Trane Dealer Resource Center, the one place for you to go for all your dealer resources.

**VISIT:** [www.traneddealerresourcecenter.com](http://www.traneddealerresourcecenter.com)



THE 120V POV IS COMPATIBLE WITH ALL OUR HEAT PUMPS.



## Pick Up Your Heat Pump Order Fast.

Text your requests for curbside pick-up directly to our product experts at the participating locations below.

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

### CALIFORNIA | NEVADA

**ANAHEIM**  
(714) 520-6440

**CATHEDRAL CITY**  
(760) 770-6762

**CULVER CITY**  
(310) 391-2291

**GILROY**  
(408) 846-6469

**LANCASTER**  
(661) 945-6902

**ONTARIO**  
(909) 969-2272

**POMONA**  
(909) 517-3810

**S SACRAMENTO**  
(916) 210-7993

**AZUSA**  
(626) 969-1874

**CHATSWORTH**  
(818) 341-5200

**EL CAJON**  
(619) 258-9382

**HAYWARD**  
(510) 782-9820

**MANTECA**  
(209) 239-6446

**PASO ROBLES**  
(805) 434-3114

**RIVERSIDE**  
(951) 784-0506

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

**BAKERSFIELD**  
(661) 335-7200

**CHICO**  
(530) 893-2114

**FRESNO**  
(559) 538-6124

**INDIO**  
(760) 775-7400

**NEWBURY PARK**  
(805) 376-3576

**PITTSBURG**  
(925) 778-1237

**N SACRAMENTO**  
(916) 924-8661

**LAS VEGAS, NV**  
(702) 260-9388



# GET ELECTRIFIED!

RECEIVE A  
**\$200  
INSTANT  
REBATE**  
WHEN YOU PLUG IN

ZERO  
EMISSION



Receive a **\$200 INSTANT REBATE** for heat pump conversions in the 14 ng/J Air Quality Management districts.\*

## QUALIFYING HEAT PUMPS:



\*AQMD locations only.  
Visit [aqmd.gov/home](http://aqmd.gov/home) for more information. Complete system sale required. Expires December 31, 2021.



### ION™ SYSTEM SERIES:

ION™ 18  
WITH  
SMARTSENSE®  
(CVH8)

**smartsense**  
TECHNOLOGY



ION™ 16  
TWO-STAGE  
(CCH6)



ION™ 16  
(CSH6)



### PERFORMANCE SERIES:

PERFORMANCE  
16 / 15 / 16 / 14 / 14  
(N4H6 / NXH5 / NXH6 / N4H4 / N4H4\*\*C)



PERFORMANCE 14  
COMPACT  
(NH4H4)

## GET YOUR REBATE

Text us now at one of our locations to learn more about the instant rebate of up to \$200.

Monday – Friday, 7:00 a.m. – 5:00 p.m.\*\*

**ANAHEIM** (Cerritos)  
(714) 520-6440

**ANAHEIM** (Claudina)  
(714) 520-0026

**AZUSA**  
(626) 969-1874

**BAKERSFIELD**  
(661) 335-7200

**CATHEDRAL CITY**  
(760) 770-6762

**CHATSWORTH**  
(818) 341-5200

**CULVER CITY**  
(310) 391-2291

**FRESNO**  
(559) 538-6124

**INDIO**  
(760) 775-7400

**LANCASTER**  
(661) 945-6902

**MANTECA**  
**(209) 239-6407**

**NEWBURY PARK**  
(805) 376-3576

**ONTARIO**  
(909) 982-9699

**POMONA**  
(909) 517-3810

**RIVERSIDE**  
(951) 784-0506

**SAN GABRIEL**  
(626) 458-2432

**SANTA CLARITA**  
(661) 287-3142

**VAN NUYS**  
(818) 779-0894

\*\*Hours may differ – please check with your local store.





# Industry News



## CALIFORNIA



### Fieldpiece Takes Home Silver Award in NEWS Contest

**Orange, Calif.** – Fieldpiece Instruments, the leading manufacturer of professional-grade tools for HVACR pros by HVACR pros, has once again been recognized for excellence in product design in The NEWS Dealer Design Contest. This year, Fieldpiece won the Silver Award for the Job Link® System Dual Port Manometer in the Testing and Monitoring Products Category.

An independent panel of contractors acted as judges in the contest that had 117 entries. The ACHR News is a national trade magazine in the heating, ventilating, air conditioning, and refrigeration industries. NEWS Publisher Mike Murphy stated,

“These awards give us a unique opportunity to recognize the outstanding research and development efforts that go into many of the products serving the HVACR industry and the awards issue gives our readers an opportunity to read about innovative installation and service solutions.”

The revolutionary JL3KM2 Job Link® System Manometer probes give HVACR pros the freedom to work the way they want to – unrestricted by hoses, so technicians get readings from optimal locations on every system, every time. The Job Link® System works wirelessly from up to 1000’ away and the HVACR technician will look professional and give customers confidence of a job well done with pre- and post-reporting. They can also retrieve system performance data from the last service date for quicker assessment.

“We’re proud to be recognized by the contractors who judged the products in the Testing and Monitoring Category,” said Rachel Newport, Director of Marketing for Fieldpiece.

For more information about the Job Link® System Dual Port Manometer, please visit: [https://www.fieldpiece.com/product/jl3km2-job-](https://www.fieldpiece.com/product/jl3km2-job-link-system-dual-port-manometer-probe-kit/)

[link-system-dual-port-manometer-probe-kit/](https://www.fieldpiece.com/product/jl3km2-job-link-system-dual-port-manometer-probe-kit/).

.....

### Gryphon Investors Acquires Wittichen Supply Company

**San Francisco** – Gryphon Investors announced that it has acquired Wittichen Supply Company. This represents the second investment closed by Gryphon’s Heritage Fund. Financial terms of the transaction were not disclosed.

General Manager Charles Herring, who has been with Wittichen for 48 years, will become president of the company, and will continue to work closely with the existing management team.

“Wittichen is a 100-year-old brand with a strong culture and exceptionally loyal employee and customer base,” said Craig Nikrant, Gryphon operating partner on the Heritage Fund Team. “We look forward to partnering and supporting the Wittichen management team in their next phase of growth by leveraging Gryphon’s in-house Operations Resource Group and Human Capital Team to enable further investment in its business

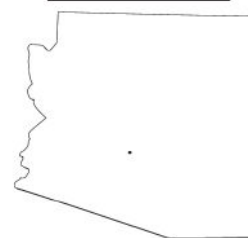
and employees.”

“We are excited to welcome and partner with the Gryphon team as we build on our recent growth and look to the future,” said Herring. “We are experiencing steady demand for product repair, maintenance, and improvements. We expect that demand will continue in a post COVID-19 environment that is driving greater need for high-quality, safe air filtration. We look forward to servicing our existing and new customers with the same great team, supported by the added resources provided by our new partner.”

“My goal is to leave the Company, our employees, customers, and suppliers in the best hands. I feel confident that we have found the best partner in Gryphon,” said David Henderson, outgoing president of Wittichen. “Our business has been built on providing a premium service and customer experience and that will not change. Gryphon’s financial resources and operational know-how will be invaluable as Wittichen builds on its geographic expansion and continues to look for the most innovative ways to serve our loyal customers.”

.....

## ARIZONA



### Harris Named to Top Workplaces Regional Lists

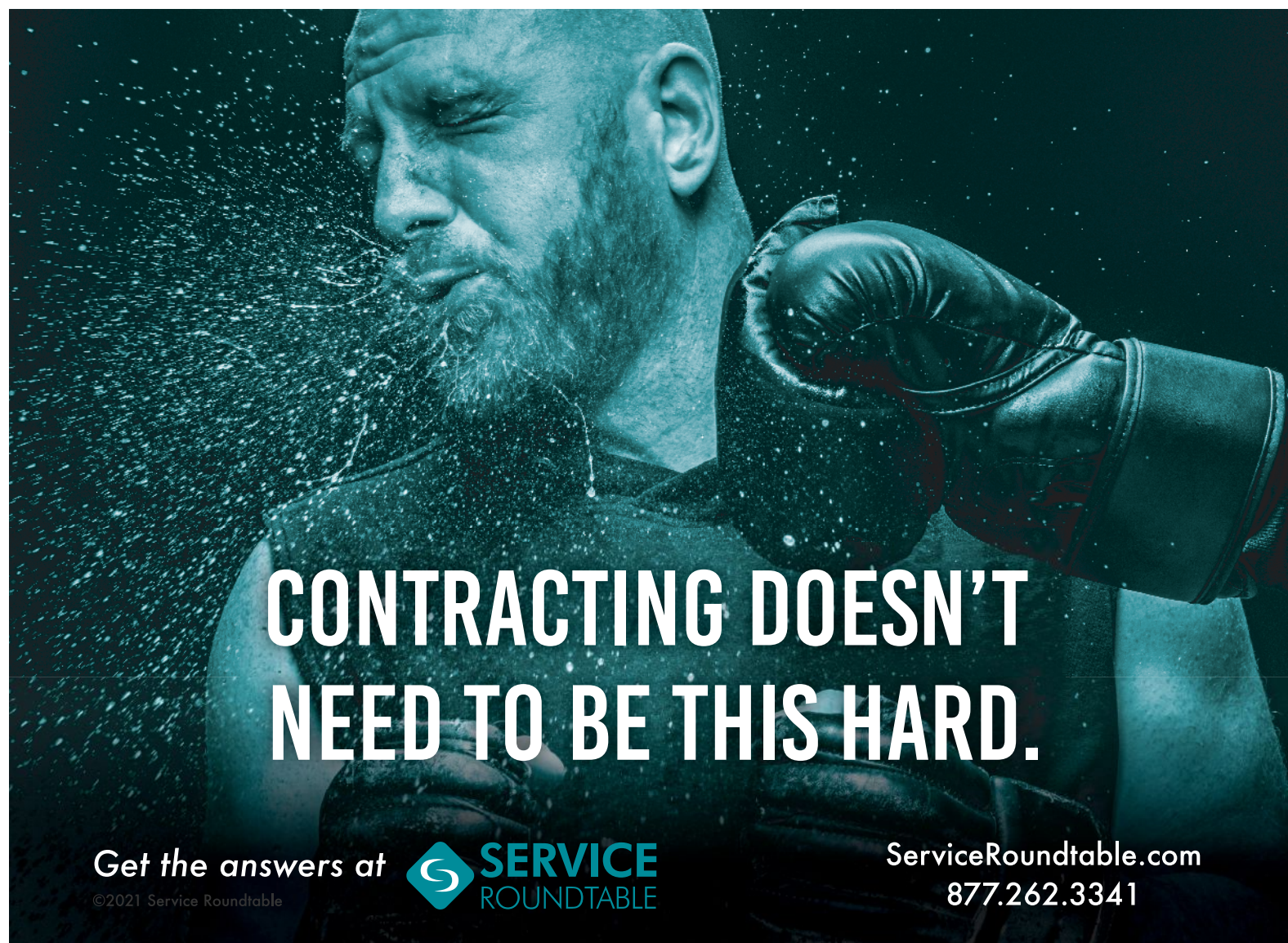
**Phoenix, Ariz.** – Two regional offices of Harris have been named to the list of 2021 Top Workplaces. Its Las Vegas office made the list of Nevada Top Workplaces and its Phoenix office was named to The AZ Central Top Workplaces list.

This is the second year in a row that Harris’ Las Vegas location has received this honor. Out of hundreds of entries, only 42 Nevada workplaces qualified for the list. The Las Vegas Review-Journal and Las Vegas Business Press partnered with third-party research firm Energage LLC. For the Arizona honors, 110 Phoenix workplaces made the list. The AZ Central partnered with Energage for its rankings as well.


“This was an exceptional year – one that required businesses across the country to adjust to extraordinary circumstances,” said Las Vegas’ Doug Lea, senior vice president and general manager, Harris. “Our workforce is the heart of our office. They’re a strong group of collaborators who care deeply for each other. Throughout this past year, the team adapted and continued to serve our customers every step of the way.”

“It’s an honor to receive this recognition as it spotlights organizations with strong employee connections and a sound culture of success,” said Phoenix’s Kelly Gantverg, general manager, Service and Building Automation, Harris. “Businesses across the country needed to adapt this past year and ours did. We have a team of collaborators who put our customers first and care about each other. We’re really proud of this group.”

“On behalf of all Harris, we congratulate our Las Vegas and Phoenix teams,” said Devlin, senior vice president, Human



**CONTRACTING DOESN'T NEED TO BE THIS HARD.**

Get the answers at  **SERVICE ROUNDTABLE**

©2021 Service Roundtable

[ServiceRoundtable.com](https://www.serviceroundtable.com)  
877.262.3341

Continued on Page 6

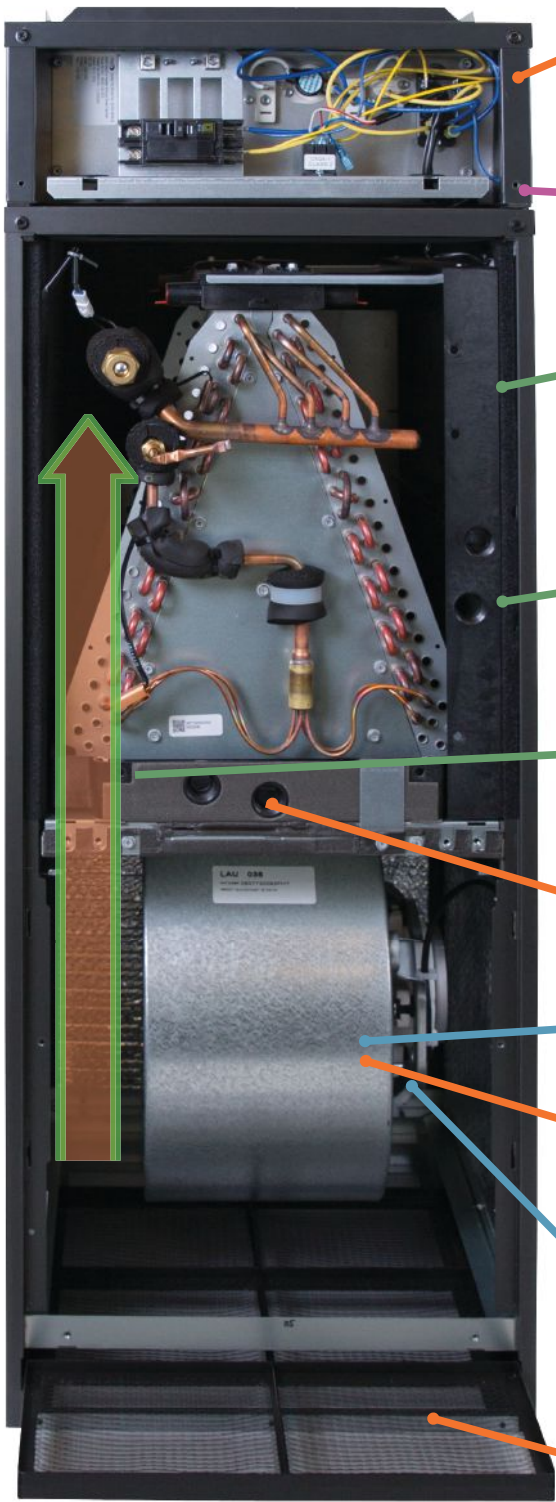


# Mitsubishi Electric Multi-Position Air Handlers



Our multi-position air handlers are the perfect option for replacing a traditional gas furnace by providing powerful, quiet and efficient cooling and heating solutions for any home

Air Handler Key Features		
SVZ Series		PVA Series
9,000 - 36,000	Capacities	12,000 - 42,000
Low as 29dBA	Sound	Low as 24dBA
Up to 18.0	SEER	Up to 21.4
Up to 13.6	HSPF	Up to 11.2
Up to 4.2	COP	Up to 4.1



Optional auxiliary heat kit can be mounted on top of the air handler, simplifying field installation



Black ZAM™ material is a highly corrosion-resistant coated steel (zinc, aluminum and magnesium)



One inch R4 2 fiberglass-free insulation is not compressed and there is no screw penetration through the insulation, resulting in minimal condensation on the exterior



Cabinet air leakage is less than 2.0% at 1.0 in. w.g. (tested in accordance with ASHRAE Standard 193)



Unique blow-through design results in a positive pressure cabinet and allows simple coil cleaning when the blower is removed



No trap required for drain



Forward curved blower ensures quiet operation



Selectable external static pressure:  
0.30, 0.50 and 0.80 in w.g.  
with three fan speeds at each static setting



Highly efficient, totally enclosed EC motor positioned to prevent sound from traveling through the ductwork



Washable, standard-sized filter

To find your local distributor, please visit: <https://www.mitsubishicomfort.com/find-a-distributor>



Continued from Page 4

Capital and Business Support. "This acknowledgement is especially gratifying as the recognition comes directly from our employees, which is such an important benchmark as we continue to make Harris a destination workplace across the country."

Harris was named to the Ener-gy list of 2021 Top Workplaces USA earlier in the year.

.....

## Rite Way, University of Arizona Form Partnership

**Tucson, Ariz.** – The University of Arizona Athletics department recently announced a new multi-year

agreement with Rite Way Heating, Cooling & Plumbing. The company will become an official HVAC corporate sponsor for the University of Arizona Athletics through the 2024 season.

"Arizona Wildcat Sports Properties and Arizona Athletics are excited to welcome Rite Way Heating Cooling & Plumbing to our family of corporate partners," said Joe Moeller, general manager for Learfield IMG College. "We look forward to working with their customer-focused team and connecting them with our loyal team of Wildcat fans."

In connection with the sponsorship, Rite Way will have a significant presence at Arizona Stadium and McKale Center via on-field and in-arena signage as well as in-game announcements. In addition, Rite

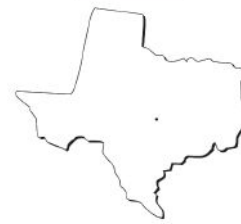
Way will also sponsor the half-time blimp at McKale Center. The sponsorship will see cross promotions with University of Arizona Athletics, including hospitality benefits during the upcoming football and basketball seasons.

"We're thrilled to be working with Arizona Athletics for the next three years as an official corporate sponsor," said Rick Walter, president of Rite Way. "We're a local company that is built to serve the people of Tucson and we're excited to be connected to our hometown team."

With the recent announcement, Rite Way joins a number of other brands and current partners of The University of Arizona Athletics, including Cheez It, Coca-Cola, and Nextiva, among others.

.....

## TEXAS



## Daikin Teams Up with Gold Medalist Mary Lou Retton

**Houston, Texas** – Like a 400-meter relay squad, a major marketing initiative from Daikin North America LLC (Daikin), a subsidiary of Daikin Industries, Ltd. (DIL), the world's #1 manufacturer of heating and cooling products, is sprinting out of the blocks this summer. An-



DAIKIN SPOKESPERSON AND OLYMPIAN MARY LOU RETTON.

choring this marketing initiative from Daikin is a nationally televised ad campaign featuring a legendary gold medalist spokesperson. Plus, Daikin has teamed with The Weather Channel, providing exclusive Daikin Air Quality Index alerts broadcast throughout the country.

Carrying the baton for Daikin's extensive media campaign is one of the most celebrated athletes ever – gymnast Mary Lou Retton, winner of five medals during the 1984 summer games. Retton will help relay Daikin's new brand message, "Perfecting the Air We Share," during integrated broadcast and digital content created by Comcast-NBC for the summer games.

Driving home the brand message is a new television ad campaign, covering both the U.S. and Canada, for "Perfecting the Air We Share." The :30- and :15-second television ads will air on several networks, including NBC, CNN, Fox, ESPN, USA, Discovery, Lifetime, History, TNT, FX, Canada's CTV and others which started mid-July.

"Introducing Daikin to a broader audience, starting during the summer games in Japan and beyond, is a tremendous opportunity for the company, our distribution chain and our contractors," said Taka Inoue, Executive Vice President and Chief Sales and Marketing Officer. "We realize that now is the right time to invest as more contractors are searching for ways to differentiate themselves and consumers are searching for high efficiency, connected systems and indoor air quality improvements. Daikin's leadership in technology and product development has recently provided Daikin contractors with products such as Daikin Fit, Daikin One ecosystem and accompanying Daikin One+ smart thermostats, providing

Continued on Page 8



# YOUR SOURCE

for

# ecobee





- Smart home thermostat with Amazon Alexa voice services built in
- Allows you to control your comfort from your smartphone
- Room sensor included to keep you comfortable in the rooms that matter
- Thermostat learns a home's energy profile and transforms data into cost savings

# IN STOCK!



## R.E. MICHEL COMPANY

---

WHOLESALE DISTRIBUTORS • AIR CONDITIONING • HEATING • REFRIGERATION  
PROPANE • EQUIPMENT • PARTS • SUPPLIES

— Since 1935 —

We're Open Every Saturday Morning!

Connect with us on






**GILBERT, AZ**  
480-571-3710

**MESA, AZ**  
480-968-0168

**PEORIA, AZ**  
602-269-0300

**PHOENIX, AZ**  
602-841-7385

**SCOTTSDALE, AZ**  
480-725-9928

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

**TUCSON, AZ**  
520-795-1484

**YUMA, AZ**  
928-248-2576

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

**EL CAJON, CA**  
619-449-9550

**ESCONDIDO, CA**  
760-291-4745

**FRESNO, CA**  
559-459-0100

**IRVINDALE, CA**  
626-962-0286

**LONG BEACH, CA**  
562-200-0089

**ONTARIO, CA**  
909-987-4207

**PASO ROBLES, CA**  
805-434-1460

**POMONA, CA**  
909-392-5626

**RIVERSIDE, CA**  
951-271-8290

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

**SANTA MARIA, CA**  
805-621-7070

**TEMECULA, CA**  
951-308-2661

**THOUSAND PALMS, CA**  
760-343-0754

**UNION CITY, CA**  
510-483-8031

**VAN NUYS, CA**  
818-781-3123

**ALBUQUERQUE, NM**  
505-884-2660

**LAS VEGAS, NV**  
702-733-7230





ENERGY EFFICIENCY

# SoCalGas® Residential Rebates

**SoCalGas Residential Rebate Programs Offer Customers Generous Rebates on High Efficiency Equipment and Installations.**

## **SoCalGas Residential Rebates Include:**

- Up to \$1000 rebate on ENERGY STAR® certified natural gas furnaces.
- Up to **\$1000** on qualifying ENERGY STAR® natural gas tankless water heaters.
- Up to **\$115** rebate on ENERGY STAR® certified natural gas storage water heaters.
- Up to **\$500** rebate on natural gas fireplace inserts.

Learn more at: [socalgas.com/rebates](https://socalgas.com/rebates)

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, 2021 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

Daikin contractors opportunities to revolutionize the future of residential HVAC systems in North America.”

On The Weather Channel, Daikin’s new brand message ties seamlessly to the network’s new Daikin Air Quality Index segment, featured nationally every Monday morning and extended into specific air quality forecasts for 33 markets throughout each day. The exclusive, new segments will run through March 2022.

“The awareness of how incredibly important air quality truly is to our overall health has dramatically increased over the past year,” said Marc Bellanger, Director of Marketing and Communications for Daikin. “As a leader in provid-

ing state-of-the-art HVAC and indoor air quality (IAQ) solutions, such as our Daikin One ecosystem line of IAQ products, we want to help educate and inform everyone as to what their actual, local community outdoor air quality is, and how Daikin can help monitor and control the quality of air inside their homes where it is most important.”

All the campaign elements, televised and digital, feature co-branding opportunities and customer lead generation components for Daikin’s independent HVAC contractor network. For example, The Weather Channel’s Daikin Air Quality Index tailored to local markets and Mary Lou Retton’s NBC summer games segments will be co-branded by local Daikin contractors.

For more about Daikin, visit [www.NorthAmerica-Daikin.com](http://www.NorthAmerica-Daikin.com).

.....

## Service World Expo Set for Sept. 21-24

**Coppell, Texas** – Service World Expo officials announced the home service contracting expo will be held in Louisville, Kentucky, on September 21-24. The Expo will feature Gino Wickman, author of *Traction: How To Get A Grip On Your Business* and founder of the Entrepreneurial Operating System (EOS), for both a keynote and a workshop.

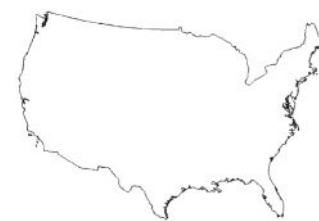
Attendees will be able to network with friends and colleagues at three parties. The first will be held at the Peterson-Dumesnil House on Tuesday, September 21, at 6:30 PM. The second party will be a themed

“Off to the Races” costume party at the Louisville Palace Theater on Wednesday, September 22, at 6:30 PM. Finally, a party will be held at the iconic Churchill Downs for a racing event on Thursday, September 23, at 5:00 PM. Parties are included in the expo registration for no additional charge.

“The immersive aspect of being at a conference, I think it ramps up your learning, it ramps up your comprehension,” said Tom Peregrino of Daffan Cooling and Heating in Granbury, Texas. “I’ve seen people get motivated and inspired by just one moment in a conference, they get fired up, they re-engage, re-inspired, and that’s what’s really cool to see. You just can’t duplicate that; Zoom can’t duplicate that. You can’t get some of these pivotal emotional organizational changes

without conferences like Service World Expo. There’s something magical about getting away from your company, recharging your battery, and really working on what’s happening in your organization.”

## NATIONAL



## Bryant Names Charles Bryant Award Winners

**Indianapolis, Ind.** – Bryant has announced that Chapman Heating | Air Conditioning | Plumbing of Indianapolis; Redmond’s Complete Comfort of Beech Creek, Pennsylvania; and Welsch Heating & Cooling of St. Louis, Missouri, were named the 2021 Charles Bryant Award winners. This is the first time in the award’s history that three dealers have earned this distinction in the same year. Bryant, a leading supplier of heating, ventilating, and air conditioning (HVAC) equipment, is a part of Carrier Global Corporation (NYSE: CARR), a leading global provider of healthy, safe, sustainable and intelligent building and cold chain solutions.

The Charles Bryant Award, named for the company’s founder, recognizes loyal Bryant Factory Authorized Dealers (FADs) that epitomize the characteristics of Charles Bryant, including professionalism, quality, reliability and community spirit.

Jeff Chapman, President, Chapman Heating | Air Conditioning | Plumbing, said, “It’s always an honor to get another recognition for our employees that really do all the heavy lifting. This award recognizes our people that make us who we are and it’s always an honor to represent my employees and my team.”

Brian Redmond, Owner, Redmond’s Complete Comfort, stated, “Being honored with the Charles Bryant Award is a real pleasure. We would like to thank our customers, our distributor Peirce Phelps, Bryant and our entire team for always providing greatness and doing

Continued on Page 10



## Education for Your Future

Energy Efficiency Starts Here

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.

### SEPTEMBER



#### Webinar System Diagnostics Module

Instructors: Mitch Bailey / TBA  
Wed., Sept. 15 – Part 1  
Thurs., Sept. 16 – Part 2  
Wed., Sept. 22 – Part 3  
Thurs., Sept. 23 – Part 4

### OCTOBER



#### Webinar NATE Core & Gas Heating Training

Instructors: Mitch Bailey / TBA  
Wed., Oct. 20 – Part 1  
Thurs., Oct. 21 – Part 2  
Wed., Oct. 27 – Part 3  
Thurs., Oct. 28 – Part 4

### NOVEMBER



#### Webinar NATE AC/HP Refrigeration & Air Distribution Training

Instructors: Mitch Bailey / TBA  
Wed., Nov. 3 – Part 1  
Thurs., Nov. 4 – Part 2  
Wed., Nov. 10 – Part 3  
Thurs., Nov. 11 – Part 4

**Webinars are FREE of charge and online registration is required.** You can register online by visiting: [pge.com/hvactraining](http://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. ©2017 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.

Scan PG&E QR code with your Smartphone



[www.pge.com/hvactraining](http://www.pge.com/hvactraining)



# SAMSUNG Heating and Cooling Solutions

## Whole-home comfort customized to you.

Samsung's DVM S Eco heating and cooling system provides maximum comfort for your house while also saving energy. That's a win-win. And with WindFree™\* technology and quiet operations, you get even more wins.



Learn more at [SamsungHVAC.com](http://SamsungHVAC.com)



Product Registration Required  
Conditions Apply

### DVM S Eco

Available for download on the Google™ Play store and App Store®. A network connection is required. Samsung application account is necessary. \*The WindFree™ unit delivers an air current that is under 0.15 m/s while in WindFree™ mode. Air velocity that is below 0.15 m/s is considered "still air" as defined by ASHRAE 55-2013 (American Society of Heating, Refrigerating, and Air-Conditioning Engineers). © 2021 Samsung HVAC

Special HomeAdvisor  
Discount for New Members  
through USACD & Samsung!



**USAirconditioning**  
DISTRIBUTORS

**SAMSUNG**

HVAC. Built brave.

[www.samsunghvac.com](http://www.samsunghvac.com)

**800/937-7222**

[www.us-ac.com](http://www.us-ac.com) • [f](#) [i](#) [t](#)

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	CALIFORNIA Anaheim 714/776-3170 Bakersfield 661/322-7222 Concord 925/349-3712 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 S. San Francisco 650/871-8100 San Bernardino 909/885-3206	San Diego 858/279-9750 San Jose 408/278-1555 San Leandro 510/618-2300 Santa Barbara 805/962-2999	Santa Fe Springs 562/801-5432 Santa Rosa 707/566-9810 Signal Hill 562/981-2010 Stockton 209/466-4153	Temecula 951/296-6557 Valencia 661/666-9544 Van Nuys 818/464-3387	IDAHO Boise 208/672-1244 or 800/727-9936 Idaho Falls 208/542-5270	NEVADA Sparks 775/329-3455 UTAH Salt Lake City 801/485-8071 or 800/333-8436
--	---	--	--	---	--	---	---	--	---	---	--	--	---



Continued from Page 8

whatever it takes.”

Butch Welsch, President, Welsch Heating & Cooling, said, “I am extremely proud to receive the Charles Bryant Award. Bryant’s core values match those of our company and that has encouraged us to team with them. That is also why this award means so much to me.”

“We’re pleased to present this year’s Charles Bryant Awards to our three winners,” said J.T. Holtschlag, Vice President, Sales and Marketing, Carrier. “The Charles Bryant Award honors those Bryant FADs that embody all the qualities that have made our brand what it is today. These three businesses have truly made a positive impact in their communities

and are model organizations in the heating and cooling industry.”

For more information about Bryant, visit [www.bryant.com](http://www.bryant.com).

## METUS Launches Virtual Showroom

**Suwanee, Ga.** – Mitsubishi Electric Trane HVAC US (METUS), a leading supplier of Ductless and Ducted Mini-split and Variable Refrigerant Flow (VRF) heat-pump and air-conditioning systems, announces the launch of an interactive and immersive virtual showroom for their line of residentially-targeted air-conditioning and heat-pump products. The showroom enables distributors, contractors, and end users in METUS’ International

region – Mexico, Central America, Bermuda, select areas of South America and the Caribbean – to remotely browse the different inverter technologies in a photorealistic, 360-degree environment.

METUS worked with ByondXR retail tech startup company to create a virtual showroom with the goal of expediting HVAC buying while eliminating the need for travel and reducing overall expenditure. “The idea was born in the middle of the COVID-19 pandemic as a mechanism to continue promoting our products and bringing people closer together,” says Gina Larrea, residential sales, international business unit, Mitsubishi Electric Trane HVAC US. “We want customers to learn basic product information and to see the full range we have available.”

Visitors can navigate the virtual



MITSUBISHI ELECTRIC TRANE HVAC US RECENTLY LAUNCHED ITS VIRTUAL SHOWROOM.

showroom to view products up close, download catalogs, and watch new-product videos. Visitors can also interact through live chat and email to gather insights and information about METUS distributors and their locations.

The adoption of digital technologies has served as a crucial component in maintaining revenue stream,

brand awareness, and increased exposure, especially while the pandemic impacted supply chain and manufacturing processes.

“ByondXR has helped us create a unique and engaging shopping experience,” Larrea added. “Their team embraced the challenge of learning a new industry and successfully executed our vision.”

To view the showroom, visit <https://byondxr-viewer.byondxr.com/launcher/1.0.43/index.html?experienceId=15Pkbp>.

## Free virtual courses that keep you ahead of the curve

Access online classes from the comfort of your home or office



### IHACI - Chiller Module 2-Part Series

Sept 1, 2, 6 | 6 p.m. - 8 p.m.

### IHACI - Commercial Cooling Tower Module 2-Part Series

Sept 8 & 9 | 6 p.m. - 8 p.m.

### D&R International - Commercial Refrigeration 4-Part Series

Sept 14, 16, 21, 23 | 5:30 p.m. - 7 p.m.

### SC Engineers - Back to the New Normal: CDPH Removal of COVID-19 Modifications

Sept 16 | 9 a.m. - 10 a.m.

### ITsAboutQ.net - Online Training Program - Technician Education & Certification On-Demand

▶ Reserve your seat today or check out other classes at [seminars.sdge.com](http://seminars.sdge.com).

Some programs are funded by California utility customers and administered by San Diego Gas & Electric® under the auspices of the California Public Utilities Commission.

© 2021 San Diego Gas & Electric Company. All copyright and trademark rights reserved. S2170072 0821



## Johnson Controls Invests \$15M to Upgrade Lab

**Milwaukee, Wisc.** – Johnson Controls has upgraded the testing lab facilities at its residential HVAC manufacturing plant in Wichita, Kansas. The nearly \$15 million investment includes the addition of seven test chambers, automated testing and model shop equipment, and a new building, which adds 2,000 more square footage, bringing the plant’s total testing facilities to 100,000 square feet total.

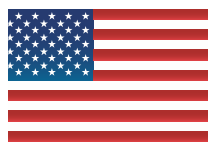
The following lab updates optimize the testing process:

- Seven 20 x 60-foot test chambers
- A new automated heating lab and test stands
- Advanced model shop equipment
- A spacious transit table building with rain capabilities

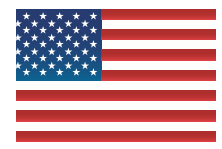
“When visitors tour the lab, they are simply overwhelmed by the extensive steps that we take to ensure each and every system developed in the labs are tested to ensure performance and reliability,” said Doug Dorrough, director of lab operations, Johnson Controls. “The greater efficiency and unprecedented quality we can now achieve with this major investment will bring our premier products to market sooner and provide homeowners with enduring

Continued on Page 12





# NEW IN USA



Maestro A/C & Heat Pump with no outdoor unit!

## THE SOLUTION WITH NO ARCHITECTURAL IMPACT



# MAESTRO<sup>PRO</sup>

With no outdoor unit



we make life better®



### Features:

- Inverter Compressor and Variable Speed Motor
- Heating & Cooling Capacity up to 11,600 btu/h
- Installation Versatility: Low and High Wall
- Easy Installation & Maintenance
- Remote Control (standard)/Wall Thermostat (optional)
- 115V 1 phase power

### California

**Bakersfield**  
661.633.1202

**Chatsworth**  
818.886.4071

**City of Industry**  
626.855.8700

**Dublin**  
925.833.8032

**Escondido**  
760.747.2404

**Fresno**  
559.455.1200

**Lakeside**  
619.441.0307

**Lakewood**  
562.426.1338

**Modesto**  
209.522.4822

**Orange**  
714.978.6341

**Oxnard**  
805.485.9403

**Riverside**  
951.682.7474

**Sacramento**  
916.339.9103

**San Diego**  
619.262.7543

**Thousand Palms**  
760.343.0885

**Van Nuys**  
818.785.1134

### Arizona

**North Phoenix**  
480.305.0100

**Phoenix**  
602.437.2823

**Mesa**  
480.844.1140

**Tucson**  
520.323.8783

**Yuma**  
928.329.9682

**Nevada**  
**Las Vegas**  
702.798.1234

**OLIMPIA  
SPLENDID**  
HOME OF COMFORT

**ITALIAN  
COMPANY**  
SINCE 1956

[www.olimpiasplendidusa.com](http://www.olimpiasplendidusa.com)  
[sales@olimpiasplendidusa.com](mailto:sales@olimpiasplendidusa.com)



Continued from Page 10

comfort and peace of mind.”

The upgrades coincide with new efficiency standards, including the 2023 Department of Energy (DOE) efficiency standards and environmental sustainability requirements, including the Environmental Protection Agency’s (EPA) low-global warming potential (GWP) refrigerant transition that will be required of all HVAC equipment manufactured by January 1, 2025. The expanded lab will better accommodate product development and testing schedules to ensure that each product meets or exceeds all requirements.

Johnson Controls will continue to invest in and expand the testing facilities in Wichita over the next several years with new equipment

and additional facilities to accommodate new product development and testing.

## ACCA Launches Marketing Masters Awards Program

**Alexandria, Va.** – The Air Conditioning Contractors of America (ACCA) launched its newest awards program, ACCA’s Marketing Masters Awards.

The awards are broken into five categories:

- Traditional Media – Print
- Traditional Media – TV or Radio
- Connections through Social Media
- Connections through Digital

or Mobile Marketing

- Rolling Marketing – Vehicles

Each category will honor three contracting companies – with a gold, silver, or bronze designation – that exhibit creativity, clarity, and effectiveness of each of the programs/promotions. The companies that receive the gold designation in each category will compete head-to-head for the Elite Marketing Master Award, which will be selected by ACCA Conference attendees during ACCA’s 2022 Conference & Expo taking place March 28 – 30, 2022, at the St. Louis Union Station Hotel in St. Louis.

“ACCA loves to showcase contractors who are innovative and working to shine a positive light on our essential industry to the public,” said Barton James, ACCA

president and CEO. “The new Marketing Masters Award gives ACCA the unique opportunity to highlight some of the best contracting companies in the country for their work.”

“Given RYNO’s 14 years of reputable digital marketing for HVAC contractors all over the US, it made sense for us to partner on this program,” said Chris Yano, RYNO Strategic Solutions CEO. “We’ve been a part of and seen some of the most successful, creative, and progressive marketing campaigns with contractors of all sizes. Our core competency is lead generation through digital marketing, but giving back is a core value of ours and this award allows us to do just that for the industry we love.”

Any contracting company, regardless of ACCA membership status, who is engaged in the creation and use of marketing to promote an

HVAC contracting business is eligible to apply for and win a Marketing Masters Award. Advertising agencies may submit entries for contracting companies, however, since this is a contractor award, the contracting company will be awarded for the entry if chosen as the winner in any category. Marketing campaigns and merchandising events held between January 1, 2020, and December 31, 2020, are eligible and one entry may be submitted to multiple categories.

There is an application fee for each category, which you will be billed for upon submitting the application. The application fees are as follows:

- First category \$69 (\$99 for non-members)
- Each additional category \$39 (\$69 for non-members)

To learn more and to submit a Marketing Masters application, visit [www.acca.org/members/awards/marketing-masters](http://www.acca.org/members/awards/marketing-masters). The deadline to apply for the Marketing Masters Awards is November 30, 2021.

## Unified Group Addresses Safety Culture at Annual Directors Forum

**Broadview, Ill.** – In June, members of The Unified Group gathered from 12 different states to attend the 2021 Safety Directors Forum – the group’s first in-person networking event since the start of the pandemic. Attendees met at The Hotel Contessa in Texas after months of virtual meetings.

Gary Glader of The Horton Group, based in Orland Park, Illinois, began the forum with a presentation on improving the safety culture within organizations by creating positive relationships with employees. His topics included general contractors and safety, aging workforce issues/solutions, and OSHA compliance. Later, members broke into smaller groups to talk about their own safety cultures and share best practices. Robert Fisher of Air Comfort Corporation ended the first day’s session by sharing information on stress in the workplace.

On day two of the forum, Dave Ude of Air Controls and Scott Martello of Intech Mechanical discussed how they

# THIS IS EFFICIENCY



**Puro-green®**  
Extended Surface  
Air Filters

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

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

866-247-4827  
[www.parker.com/HVAC](http://www.parker.com/HVAC)

© 2021 Parker Hannifin Corporation



ENGINEERING YOUR SUCCESS.

Continued on Page 14



**Opteon™ XL41** (R-454B)

# The Clear Future of HVAC Refrigerants.



## Refrigerant Technology Designed for the Businesses of Today and Tomorrow

Opteon™ XL41 from Chemours is designed to meet the most stringent environmental and safety standards for A2L refrigerants, so you can feel confident making the switch from R-410A. Unlike industrial chemicals, XL41 is classified as mildly flammable, so it's safe for use when standards are followed. Chemours provides the training and ongoing guidance you need to work with the next generation of refrigerants safely and effectively. Contact us today to learn how Chemours can help you transition to XL41 and be ready for the post-HFC landscape of the HVAC industry.

**Visit [Opteon.com/GoBeyond](https://www.opteon.com/GoBeyond)** to learn why XL41 is the optimal choice for the HFC phase down landscape of the HVAC industry.



**Opteon™**

The Performance Today Demands. The Future Tomorrow Deserves.



Continued from Page 12

instill safety values in new hires while Dawn Bridges of Wiegmann Associates and Dennis Gardner of Johnson & Jordan Inc. discussed their safety communication within and outside of their organizations.

“Getting this amount of knowledge present in one room and professionals who are willing to share is amazing,” said member Brian Scott of Mechanical Service & Systems Inc.

Additional topics discussed during the second day’s session included fleet safety, training processes, and the benefits of Paychex software as part of a workplace safety solution.

On the last day, Paul Benson of Midstate Energy/Veregy demonstrated the value of SiteDocs for Safety and Project Documents computer software for his company. Erica Peet of VHV Company said her company’s reinstated safety committee has been effective for overall performance, and Johnny Lucas of Cullum Mechanical Construction gave details on his training program for equipment users.

Diversity in the workplace rounded out the topics discussed, and members had the opportunity to reveal their personal experiences and gain insight on ways to cultivate and support a more diverse environment.

.....

## Rheem to Acquire Friedrich AC

**Atlanta, Ga.** – Rheem has announced its intent to acquire Friedrich Air Conditioning from Monomoy Capital Partners.

“Friedrich has steadily innovated its residential and commercial offerings and grown its market share,” said Mike Branson, president, Global Air at Rheem. “They will bring a unique air conditioning product portfolio along with specialized products to the Rheem family of brands. Friedrich’s product offerings, company history and industry expertise make this acquisition a perfect fit for Rheem. Together, we will harness the power of our talented workforce and enhance our ability to deliver reliable and energy-efficient products that our customers and contracting partners expect.”

Upon the close of the acquisition – which is subject to additional regulatory approval – Friedrich will be a standalone business unit within the Rheem Global Air business.

.....

## RIDGID Tour Kicks Off with Stops in Eight Countries

**Elyria, Ohio** – RIDGID®, a part of Emerson’s professional tools portfolio, has taken its successful RP 350 Press Tool Tour global, making stops in Belgium, Denmark, France, Germany, Greece, Italy, Romania and the United Kingdom. As part of the tour, plumbers are testing the RP 350 on job sites and sharing their experiences on Instagram®. The global tour kicked off in Germany in May and concludes in September in Romania.

During the U.S. tour, 10 plumbers tested the RP 350 over the course of seven months, sharing their insight and excitement about the advanced, long-running press tool that’s built for the most demanding job sites.

“After seeing the positive response to the RP 350 U.S. tour, it’s exciting to expand the tour and see similar reactions from plumbers globally,” said Michael Provenzano, global marketing director, press connections, RIDGID for Emerson. “The trade professional is always at the heart of every tool RIDGID creates and our team loves to hear how our latest tools outperform their expectations on the job site.”

“The speed of this press tool is remarkable and the ease to use it even one-handed makes it valu-

able beyond the other press tools I’ve used,” said George DeJesus, owner of George’s Drains LLC and headliner in the U.S. RP 350 Press Tool Tour. “Sometimes I need to be able to press in tight spaces and the 360° rotation with the super bright LED light makes it possible. I really appreciate RIDGID for believing in me to be one of the first people to try out this tool.”

Introduced by RIDGID last year, the RP 350 features a brushless motor eliminating scheduled motor service intervals for less downtime, a 360-degree swivel head and the most advanced LED interface and lighting. It is ideal for making connections on residential, commercial and industrial jobs; is compatible with the full line of RIDGID jaws and rings; and offers maximum versatility, pairing with the RIDGID Press Booster, StrutSlayr™ Strut Shear Head and the Press Snap™ Soil Pipe Cutter.

Emerson’s professional tools business, which includes RIDGID as well as the Greenlee® and Klauke® brands, provides the industry’s broadest portfolio of advanced, reliable tools and technologies for the mechanical, electrical and plumbing trades globally. Visit [emerson.com/professionaltools](http://emerson.com/professionaltools) for more information.

.....

## Danfoss Seeking EnVisioneer of Year Award Nominations

**Baltimore, Md.** – Danfoss has announced it is now accepting entries to its twelfth annual EnVisioneer of the Year award competition.

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

Interested participants may enter the competition by submitting a nomination by October 15, 2021. Applications will be reviewed and selected by a panel of third-party judges representing various disciplines.

Recent winners of the EnVisioneer of the Year program include Sheridan College (Oakville, Ontario); Arctic Cool; Multistack and Escambia County School

District (Pensacola, Florida); Delfield; Smardt Chiller Group; and EMCOR Services Mesa Energy Systems (Irvine, California).

.....

## Arcline Investment Management to Buy Dwyer Instruments

**Michigan City, Ind.** – Arcline Investment Management announced that it has acquired a controlling stake in Dwyer Instruments from the Clark family and management.

“The Clark family and the Dwyer team have built a strong brand with market-leading sensor and instrumentation solutions for process automation markets,” said Arcline. “We believe the company’s differentiated products position is well to serve the growing trend toward greater process automation, connected devices, and improved indoor air quality and energy efficiency. We are excited to partner with management to steward the business in its next phase of growth.”

“From early in the process, it was clear that Arcline understood our business and would be a tremendous fit to carry on the Dwyer legacy,” said Steve Clark, chairman of Dwyer. “I could not be happier with the outcome and look forward to following the growth of the business in the future.”

.....

## Pacific Northwest Contractors Can Earn Extra for Installations

**Portland, Ore.** – Until April 30, 2022, contractors in the Pacific Northwest can earn an additional \$500 for every heat pump water heater they install.


The effort is part of Bonneville Power Administration’s Comfort Ready Home program, which provides tools for utilities and contractors to grow the number of weatherization and energy-efficiency upgrades installed in homes across the Northwest. Comfort Ready Home connects contractors with homeowners looking for energy-saving products.

To participate, contractors must be licensed in their state, enrolled in the Comfort Ready Home Residential Contractor Network, and install a water heater on the BPA Qualified Products List in a Single-family or manufactured home in a participating utility’s

Continued on Page 16

### Fieldpiece

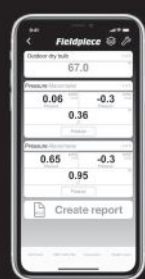
## A LITTLE CHANGE GOES A LONG WAY



**Job Link® System Dual Port Manometer**

**The freedom to work the way you want**

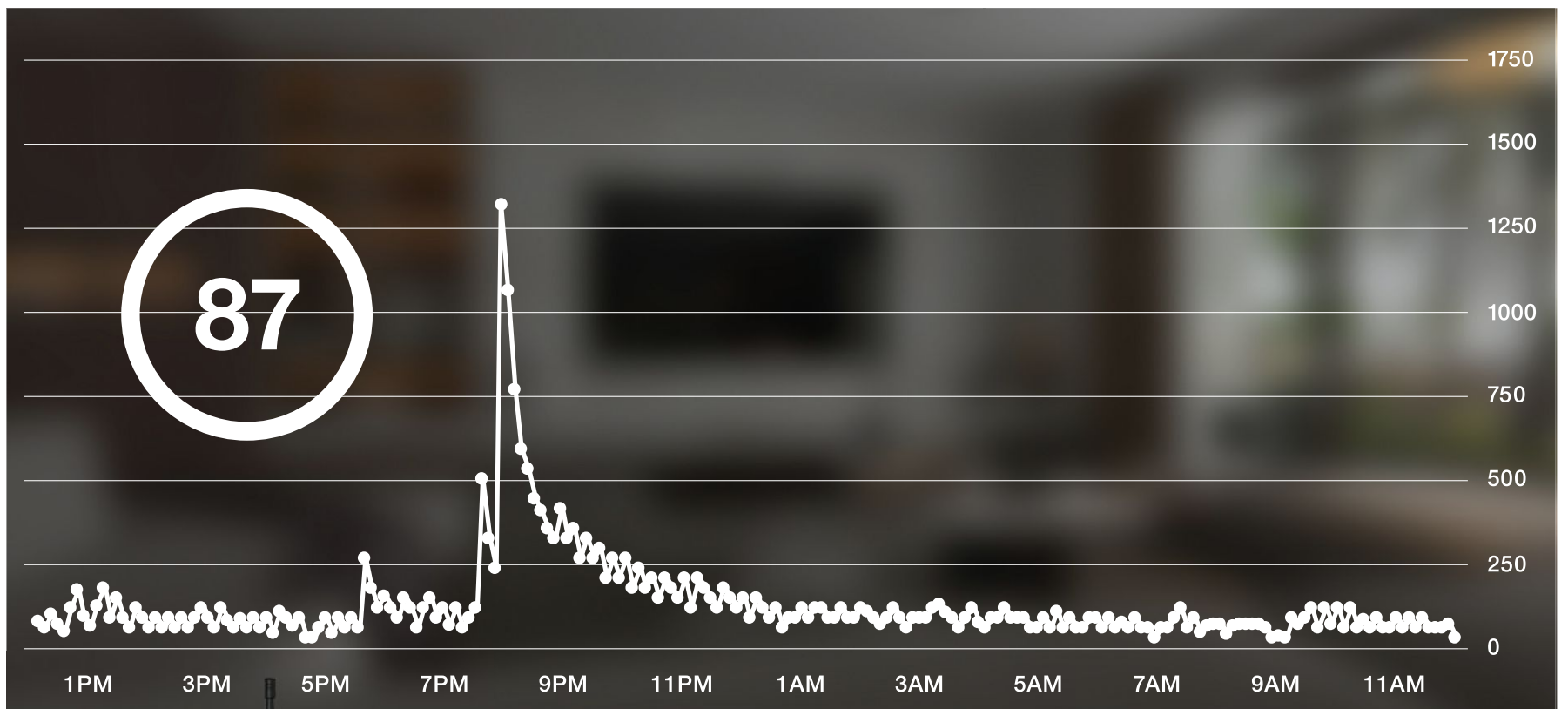
- Reliable pressure in a variety of locations
- 1000' long range wireless
- All-in-one static, gas and draft pressure
- Record up to 8 readings at once in Job Link App
- Easy zero to atmosphere
- Measure inlet and outlet gas pressures



To learn more visit [www.fieldpiece.com](http://www.fieldpiece.com)



# Don't promise your customers cleaner air. Prove it.



Specifically designed for commercial and residential applications, PuriFi is a whole-building air and surface purification technology that works directly with your central HVAC system. PuriFi combines the most sophisticated sensors with the latest air purification technology to clean indoor air of tested particulates, pathogens, odors, smoke, bacteria, and other harmful pollutants. PuriFi technology actively manages airborne aerosols and particles while proving performance in the living space.

**Contact your local Sigler office to become a certified dealer and offer your customers the latest innovation in air purification.**

**PuriFi** The science of real-time air and surface purification.

*Sigler*

The exclusive HVAC Equipment Distributor of PuriFi in the region.



#### ARIZONA

**Gilbert**  
(623) 388-5100  
**North Phoenix**  
(623) 388-5100  
**Prescott Valley**  
(928) 421-4666  
**Mesa Gateway**  
(623) 388-5100

**Tempe**  
(623) 388-5100  
**Tolleson**  
(623) 388-5100  
**Tucson**  
(520) 884-9500  
**Yuma**  
(623) 388-5100

#### N. CALIFORNIA

**Bakersfield**  
(661) 636-0792  
**Concord**  
(925) 825-1540  
**Fresno**  
(559) 487-1860  
**S Sacramento**  
(916) 387-3000

**N Sacramento**  
(916) 387-3000  
**San Jose**  
(408) 453-3300  
**S San Francisco**  
(415) 330-6600  
**Santa Rosa -**  
Coming Soon!

#### S. CALIFORNIA

**Brea**  
(714) 578-5100  
**Chatsworth**  
(818) 885-6728  
**El Cajon**  
(619) 202-1154  
**Irvine**  
(714) 921-5281  
**Irwindale**  
(626) 964-4540

**Lakewood**  
(310) 885-0368  
**Los Angeles**  
(818) 252-3351  
**Ontario**  
(909) 390-7838  
**Palm Desert**  
(760) 324-3949  
**Riverside**  
(951) 656-3737

**San Diego**  
(858) 404-9230  
**San Marcos**  
(760) 975-0290  
**Thousand Oaks**  
(805) 981-4090

#### IDAHO

**Boise**  
(208) 322-4004  
**Twin Falls**  
(208) 643-9052

**NEVADA**  
**Las Vegas**  
(702) 221-8056

#### NEW MEXICO

**Albuquerque**  
(505) 881-2929

**TEXAS**  
**El Paso**  
(915) 779-3202



Continued from Page 14

territory. (The program covers Oregon, Washington, Idaho, and small parts of California, Nevada, and Montana.)

Contractors will also receive a water heater-specific marketing toolkit and virtual training from a Comfort Ready Home outreach specialist. Learn more about by visiting <https://comfortreadyhome.com/contractors/>.

## Budderfly Signs Agreement with Lennox HVAC

**Shelton, Conn.** – Budderfly, the fastest-growing firm in the North American Energy-Efficiency-as-a-

Service (EEaaS) market, announced the company has partnered with Lennox International (NYSE: LII), a global leader in the heating, ventilation, air conditioning, and refrigeration markets. The nationwide agreement allows Budderfly to quickly scale its no upfront cost HVAC replacement program with the addition of Lennox® Model L™, an ultra-high efficiency rooftop unit, as well as expert service and maintenance on Lennox and other HVAC brands. For information on Budderfly's HVAC replacement program, please visit [www.budderfly.com/landing/hvac-contact](http://www.budderfly.com/landing/hvac-contact).

"Budderfly's EEaaS is truly unique in the industry, and our Model L rooftop unit is the perfect complement to enable them to replace inefficient HVACs that cost their customers thousands

of wasted dollars in bloated energy bills," said Stephanie Leslie, National Account New Business Development Manager, Lennox Commercial. "We are proud to partner with such a progressive organization making it easy for companies to upgrade their environmental infrastructure and reduce their carbon footprint."

The Lennox partnership is part of Budderfly's multi-component energy optimization program created in part to service national accounts in industries such as assisted living facilities, community centers, offices, quick service restaurants, retail locations, universities, and other vertical markets with multiple locations. Under the agreement, these types of companies eligible for HVAC upgrades will receive – at no upfront cost – new HVAC units and a dedicated Lennox support team for each

of their locations.

"Many of our customers inherit old HVAC units through their lease agreements and are left to fend for themselves when it comes to service and maintenance," said Al Subbloie, CEO, Budderfly. "The Lennox Model L rooftop unit allows us to bring the lowest HVAC total cost of ownership with the highest impact on efficiency and sustainability to our customers through a no-hassle installation program, so they can concentrate on growing their businesses. We've been impressed with Lennox' support for the partnership and excited to see new and existing customers' interest in our HVAC program has exceeded expectations."

For more information about the Model L, visit <https://www.lennox-commercial.com/>.

## Greenheck Group Honored by American Legion

**Middleton, Wisc.** – Greenheck Group, a world leader in manufacturing air movement, control, and conditioning products for commercial, institutional, and industrial use, was honored to accept the 2020 American Legion Large Employer of Veterans Award. The award was presented to Greenheck Group team members at the American Legion, Department of Wisconsin 102nd Convention held Friday, July 16 in Middleton, Wisc. The company is one of the leading employers of veterans in not only Wisconsin, but all their locations throughout the United States, with more than 400 team members having served in the military, making veterans more than 10% of Greenheck Group's total number of team members. The company was founded in 1947 by Bob and Bernie Greenheck after both served and returned home to Wisconsin from World War II. Their commitment to the employment and support of veterans has been a priority from the beginning.

Brian Funfar, vice president and chief information officer, and Luke Bird, sales application engineering specialist, accepted the award from Department Commander, David Wischer. Both Greenheck Group team members are veterans and strong leaders in the company's veterans' initiatives. According to Angela Chappell, The American Legion, Department of Wisconsin, Greenheck Group was nominated for the national honor by American Legion, Montgomery-Plant-Dudley Post 10, Wausau, Wisc. Chappell added, "These are national awards given annually to employers for their efforts to ensure the economic well-being of veterans of Wisconsin."

"Greenheck Group hires military veterans because those with military experience consistently show they have attributes that align with our company values," said Jim McIntyre, CEO of Greenheck Group. "Highly skilled, motivated, and committed to quality, our veterans have a proven record of integrity and professionalism. We are honored to be among those companies receiving this award."

For more information, visit [www.greenheck.com](http://www.greenheck.com).

**GRAND AIRE®**  
Heating & Cooling Products

**Baker®**  
Distributing Company

**GrandAire systems are manufactured specially for Baker Distributing Company.**

### Features & Benefits:

- Up to 16 SEER efficiency available in split systems
- Up to 14 SEER efficiency available in packaged systems
- Scroll compressors on all models with copper tube / aluminum coil
- Pre-painted cabinet finish over galvanized steel
- Multi-position evaporator coils with built in expansion valve
- Up to 90% efficiency, four-position gas furnaces
- 10 year parts warranty with timely registration
- Industry leading 1-year unit replacement warranty
- Manufactured by International Comfort Products




**GRAND AIRE®**  
ADVANTAGE WARRANTY

**1 YEAR**  
unit replacement  
limited warranty

**10 YEAR**  
parts limited warranty  
with timely registration

Visit **Bakerdist.com** to find a location near you.

 **New Location Alert: Victorville, CA**

**GROW YOUR  
BUSINESS IN 2021:**

ASK US ABOUT OUR **ONCALL AIR** SALES PLATFORM &  
**CREDIT FOR COMFORT** CONSUMER FINANCING.



Share Your **AIREX**  
Manufacturing Inc.



Install Photos to **Win!**

**Gold \$5,000.00**

and  
1 Year Supply of Airex Pro-System Kits™

**Silver \$4,000.00**

and  
6 Months Supply of Airex Pro-System Kits™

**Bronze \$3,000.00**

and  
3 Months Supply of Airex Pro-System Kits™

**4th Place \$2,000.00**

and  
1 Month Supply of Airex Pro-System Kits™

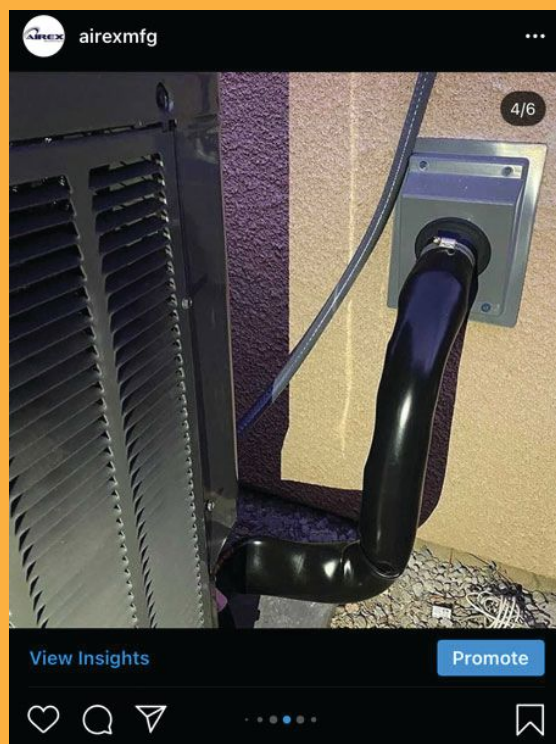
**5th Place \$1,000.00**

and  
1 Month Supply of Airex Pro-System Kits™

**6th-10th Place \$500.00**

and  
1 Month Supply of Airex Pro-System Kits™

## 2020 Winners



**\$5,000**

1 year Supply of Airex Pro-System Kits™



**\$2,500**

6 Months Supply of Airex Pro-System Kits™



**\$1,000**

3 Months Supply of Airex Pro-System Kits™

**MAY 1 - AUGUST 31, 2021**

### Rules:

- Post Your Install Photos to Instagram and tag @Airexmfg #myairexinstall and you're automatically entered to win!
- The more installs you post the better your chances of winning!
- Must use the Airex Pro-system Kit.
- Must be an HVAC Installer.
- Posts with the most likes go to the voting round.



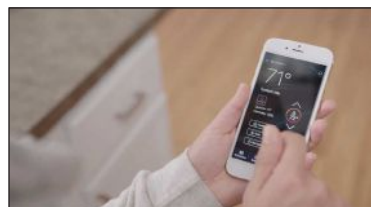
[www.airexmfg.com](http://www.airexmfg.com)





## Performance Contracting, Geothermal and Heating Products

### American Standard Home



American Standard launched American Standard Home, a smart home integration platform that offers advanced HVAC system control and diagnostic features. Formerly Nexia, the new integrated app will help HVAC professionals ensure home HVAC systems are

optimized for performance.

American Standard Home integrates with several smart home platforms. The most common use is connecting an American Standard smart thermostat to remotely update temperature, apply a schedule, and automate home comfort experience.

“As we look at the time we’ve spent indoors over the last several months, we know how important it is for our HVAC systems to create comfortable living spaces, while providing the convenience homeowners crave,” said Mel Fox, senior product manager, Trane Technologies. “Innovative, user-friendly and

practical, American Standard Home provides a seamless integrated experience for our connected homeowners.”

**More information:** [www.americanstandard-us.com](http://www.americanstandard-us.com).

.....

### Carrier Home App



Carrier has launched the new Carrier Home app, which provides homeowners with an improved experience managing their Infinity® System. This replacement for the MyInfinity app, which is available now in the Apple® App Store® and Google Play® store, provides an enhanced homeowner experience, improved functionality and increased connectivity performance between the mobile device and home comfort system. Carrier is a part of Carrier Global Corporation (NYSE: CARR), the leading global provider of healthy, safe and sustainable building and cold chain solutions.

While the Carrier Home app has a new look and improved performance, it still includes many of the features and benefits homeowners were accustomed to with the previous MyInfinity app. Homeowners will be able to control their entire advanced home comfort system to precisely manage the temperature, humidity and equipment efficiency. In addition, homeowners will be able to learn more about the outdoor air quality around their home, including the air quality index and the pollutant levels in the atmosphere.

The new Carrier Home app runs on a Carrier IO platform, which provides a solid backend and cloud platform to build robust IoT applications. This app represents the latest step in Carrier’s digital transformation journey as its residential business reinvents its holistic digital footprint.

“We’re proud to introduce the Carrier Home app to residential customers,” said Gundeep Singh, Executive Director, Digital and Analytics, NA Residential & Light Commercial, Carrier. “Homeowners will enjoy the enhanced performance that better allows them to conveniently manage their home comfort settings from anywhere. This is the next progression.”

**More information:** [www.carrier.com/residential/en/us/](http://www.carrier.com/residential/en/us/).

.....

### Enertech Global LLC The Advantage

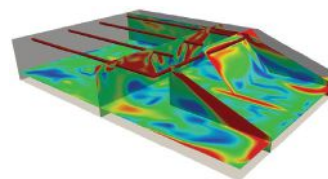


The Advantage by Enertech Global LLC simplifies and makes radiant, in-floor heating, up to 100% of domestic hot water, and forced air heating and cooling functionality easily accessible for both HVAC contractors and end-users. It simplifies the process of sourcing components and finding a proper air-source heat pump, from design to installation, by incorporating all of the necessary pieces, factory-installed, within the indoor and outdoor module in a Monobloc design. Even at freezing (32°F), the Advantage can operate at a 4 COP.

**More information:** [www.enertechgeo.com](http://www.enertechgeo.com).

.....

### FabricAir CFD Service



FabricAir introduces its FabricAir CFD Service, a 3-D computational fluid dynamics program designed specifically for fabric ducting. The service helps North American HVAC consulting engineers and contractors predict the efficiency and efficacy of a commercial building’s fabric air dispersion system design prior to construction. Developed in-house by FabricAir engineering, the software program confirms a commercial ventilation design’s airflow patterns, temperature distribution, and velocities; or identifies potentially inaccurate performance issues before factory fabrication and site installation. The software also calculates the flow patterns, pressure loss, air velocity, temperature, and other parameters affecting a space’s ventilation design.

**More information:** [www.fabricair.com](http://www.fabricair.com).

.....

### Fujitsu General America Refrigerant Branch Units

Fujitsu General America has introduced two larger Refrigerant Branch Units (RBU) to simplify installations and to



expand the heat recovery capability of their VR-II Series Airstage VRF systems.

The new RBUs, which manage simultaneous heating and cooling in heat recovery systems, can serve between eight and 12 zones. Previously, only four zones could be served by a single RBU.

This advancement permits engineers, architects and installers to use fewer RBUs and also expands the flexibility of heat recovery systems – providing the opportunity to share thermal energy across more zones.

Flexible piping arrangements and compact size allow the new RBUs to accommodate a variety of floor plans, elevations and design changes. The RBUs require no drain pan. A two-way outdoor piping option provides greater flexibility for indoor unit connections. Maintenance tasks are easily performed even with minimal clearances, an advantage that comes from a front panel that hooks to the unit for easy internal access.

**More information:** [www.fujitsu-general.com](http://www.fujitsu-general.com).

.....

### Lochinvar Reverse Indirect Water Heater

Lochinvar, an industry leader in high-efficiency boilers and water heaters, recently announced the introduction of the Reverse Indirect Water Heater to its continually expanding family of best-in-class water heating solutions. This unit is currently available in a 125-gallon capacity for a variety of applications, both residential and commercial.

“For decades, Lochinvar has been dedicated to not only cutting-edge product innovation, but also superior durability and flexibility, offering long-lasting, quality systems for a variety of applications,” said Jeff Vallett II, segment market manager for



Continued on Page 20

## Measure It. See It. Manage It. TPI View

powerful App for HVAC applications.



## TPI Smart Probes

with Bluetooth for remote operation



TPI Smart Probes & TPI View give you a crystal clear “view” of HVAC measurements, including: Combustion, Pressure, Airflow, Temperature, CO and CO2. All measurements easy to view, manage, and share from your smart device!

800-368-5719 [www.testproductsintl.com](http://www.testproductsintl.com)

Scan the code, get the FREE App







# Put confidence at the center of your renovations.

When your customers want to make more areas in their home more comfortable, turn to the highly efficient Carrier Ductless Systems. No ductwork is required, so you can have confidence you can transform room additions, attics, sunrooms and pretty much any other space into a more comfortable place.

[carrierductless.com](http://carrierductless.com)



Turn to the experts

©2021 Carrier. All Rights Reserved.



## Performance Contracting, Geothermal and Heating Products

Continued from Page 18

Lochinvar. “The top performance and dependability offered by the Reverse Indirect Water Heater is an excellent example of the Lochinvar experience our customers have come to expect, and should expect for years to come.”

Providing up to 30 GPM of continuous hot water delivery, the Reverse Indirect Water Heater is designed perfectly for multi-family, commercial and large residential water heating applications using a hydronic system. The generous hot water supply allows for an extremely dependable hot water source. The Reverse Indirect Water Heater is available in ASME and

Non-ASME construction, providing superior flexibility to fit most any job.

As with Lochinvar’s continued commitment to quality, the Reverse Indirect Water Heater comes standard with a 10-year limited warranty. It also features a 316L stainless-steel coil, a jacketed and insulated steel tank, and 2” HCFC foam insulation.

**More information:** [www.Lochinvar.com](http://www.Lochinvar.com).

• • • • •

### Noritz NCC199CDV

Noritz has unveiled the NCC199CDV condensing tankless water heater, which is approved for common-venting up to six units



in commercial applications. The new unit has a thermal efficiency rating of 98 percent, which is the industry’s highest and makes it EPA ENERGY STAR® certified.\* It has a maximum flow rate of 11.1 gallons per minute (gpm).

With its CSA Group approval for common venting in Canada and the

United States, the NCC199CDV offers contractors greater flexibility and ease-of-installation on the commercial job site.

“Common venting drastically reduces the number of required venting terminations, saving contractors time and labor,” explains Jason Fleming, VP of Sales and Marketing for Noritz. “The NCC199CDV can therefore be very cost-effective when installed in that configuration.”

With a maximum input of 199,900 BTUs per hour (BTU/hr), the NCC199CDV features two austenite 316L stainless steel heat exchangers that resist corrosion from condensate and chloride, maximizing durability and

lifespan.

Up to 24 of these units can be linked together, using the optional Multi-Unit System Controller, which offers the most control options on the market, including application functions for recirculation loops and supplemental storage tanks. BTU input can range from 18,000 to 4.8 million (for a 24-unit multi-system), yielding up to a 266:1 turndown ratio. An optional Quick-Connect cable is available for connecting two units.

Other features include:

- Multiple venting options: The NCC199CDV can vent directly, using either 2-inch or 3-inch PVC or CPVC or rigid polypropylene. As mentioned, up to six units can be common-vented indoors or installed outdoors with an optional vent cap.

- Compact design: Weighing only 81 pounds, the compactly designed heater can be easily wall-mounted. Mounting brackets line up with the top of the unit, enabling installers to more easily position it on the wall.

- Racking capability: The ability to combine (rack) multiple units offers peace of mind through redundancy: If one unit requires servicing, the others can continue to provide hot water.

- Ultra-low-NOx, modulating Eco-Burner: The premix, fully modulating burner has a nitrogen-oxide emissions level of only 14 parts per million (ppm), far exceeding the South Coast Air Quality Management District requirement of 20 ppm. The burner optimizes the air/fuel ratio to continuously match energy consumption to present demand with pinpoint accuracy. The result: better efficiency with fewer moving parts.

- High-altitude performance: The NCC199CDV can perform at an altitude of up to 10,000 feet.

- WiFi-enabled: Compatibility with the Noritz Connect app allows the user wireless remote control of heater functions, as well as diagnostic and maintenance reminders.

- Precise temperature controls: A remote thermostat can precisely adjust the output temperature from 100°F to 185°F.

**More information:** [www.noritz.com](http://www.noritz.com).



## TACKLE TOUGH JOBS WITH CONFIDENCE

Never show up to a job empty-handed — stock your toolbox with the tapes you need for a range of HVAC applications. Whether it’s a blizzard or a heat wave, choosing the right HVAC tape for your installation or repair is critical. Shurtape® preps you for success with a full portfolio of high-quality and innovative tape solutions for anything the job demands. Find a tape at [Shurtape.com](http://Shurtape.com).

**SHURTAPE.COM**  
**1.888.442.TAPE**



© Shurtape Technologies, LLC 2021/AWC 00177

**Shurtape®**  
**TRUE TO YOUR WORK®**



# SERVING THE WEST'S HVAC NEEDS SINCE 1967

**SINGLE ZONE**

**MULTI-ZONE**

WALL MOUNT  
CEILING CASSETTE  
CONCEALED DUCT



**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

**MT, WY, ID, CO, UT, NE, SD**  
Ron McKinnon  
303-909-2494

**NM**  
Don Johnson  
505-220-2481

**AR, LA, OK, & TX** (excluding El Paso)  
Frank Souders  
817-917-6469

**AZ - Southern AZ**  
Ron Schelle  
520-909-0361

**CA, NV, OR, WA, HI**  
Jim Deto  
510-387-2723

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

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



[www.dialmfg.com/ms](http://www.dialmfg.com/ms)  
INVENTORY LOCATED IN PHOENIX, AZ

## Johnson Controls Launches National Community College Partnership Program

**Company to give \$15 million over the next five years to support academic programs at nonprofit community colleges.**

Johnson Controls launched the Johnson Controls Community College Partnership Program. As part of the program, Johnson Controls will give \$15 million over the next five years to support academic programs at nonprofit community colleges. Starting in the 2021–2022 academic year, the program will endow a total of \$1 million to ten community colleges across the U.S. In addition to the funding, Johnson Controls employees will support the community colleges through volunteering and mentorships.

The grants support the expansion of associate degree and certi-

cate programs in HVAC, fire and security, and digital building automation systems, all areas where the U.S. Bureau of Labor is predicting an increased need for skilled trades expertise in the coming years. A core objective of the program is to change the trajectory of the lives of students from underserved communities by equipping them with in-demand knowledge and skills that will support employment and a pathway for life-long careers upon graduation.

“Just as smart, healthy buildings are critical to our well-being, well-educated and trained technicians are crucial to keeping our environments operating safely and efficiently,” said Grady Crosby, vice president of Public Affairs and Chief Diversity Officer at Johnson Controls. “As a leader in the building industry for over a century,

Johnson Controls is honored to share our expertise with the country’s leading community colleges. The Community College Partnership Program supports institutions through its funding and supports their students through volunteerism and mentorships. We believe this will empower people to build life-long careers that will transform their lives and their cities.”

The initial ten community colleges receiving grants are located in cities where Johnson Controls has significant customer base and employee presence. Funding for each community college differs based on its needs; in general, colleges will use the support to purchase and develop classroom materials, learning technologies, and student scholarships. Local Johnson Controls employees in each market will serve as volunteer educators, providing students with counseling

and real-world experiences. This mentoring will be directly incorporated into various college programs and also provide a pathway for student internships and entry-level employment opportunities at Johnson Controls.

2021–2022 Community College Partnership Award Recipients:

1. Kennedy-King College (Chicago, Ill.): Founded in 1911, Kennedy-King College is part of the City Colleges of Chicago, a system of two-year education institutions. The college will use its funding to establish an HVAC certification bootcamp, develop a job shadowing and field experience course, as well as provide students with their own HVAC toolsets.

2. Suffolk County Community College (Selden, N.Y.): Founded in 1959, Suffolk County Community College is a public community college, sponsored by SUNY and Suffolk County, NY. The college will use its funding to invest in state-of-the-art training simulators and growth of a guided mentoring program featuring Johnson Controls employees supporting peer mentoring and career counseling.

3. Montgomery College (Rockville, Md.): Founded in 1946, Montgomery College is a public community college in Montgomery County, Maryland. The college will use its funding to expand program marketing to local, low-income communities, hire additional faculty to serve as retention and recruitment associates, and create a Building Automation Systems lab.

4. Community College of Baltimore County (Baltimore, Md.): Founded in 1957, Community College of Baltimore County is a public community college with campuses across Baltimore County, Maryland. The college will use its funding to hire additional faculty and grow a guided mentoring program featuring Johnson Controls employees supporting peer mentoring and career counseling.

5. Lone Star College (Conroe, Texas): Founded in 1992, Lone Star College is a Texas community college in The Woodlands, north of Houston. The college will use its funding to provide financial assistance for students to obtain HVAC toolkits, PPE and learning materials, as well as tuition support. Further, the

college will use funding to grow programs that encourage students to go beyond HVAC/R certification courses and complete a full Associates Degree.

6. Henry Ford College (Dearborn, Mich.): Founded in 1938, Henry Ford College is a public two-year college in Dearborn, west of Detroit. The college will use its funding to expand the Energy Technology-HVAC program into modular units that will also be developed into open-source, online educational resources that can be shared and further developed by other learning institutions. Further, the college will purchase HVAC simulators featuring industry standard components.

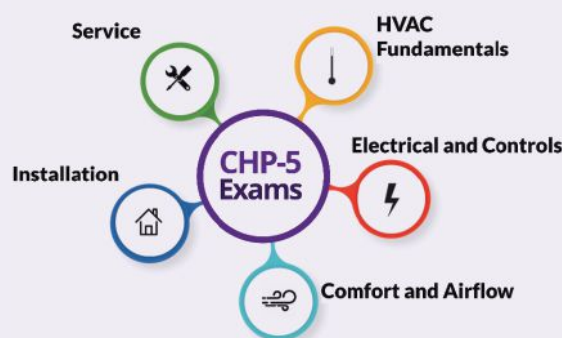
7. Essex County Community College (Newark, N.J.): Founded in 1968, Essex County College is a public community college in Essex County, New Jersey. The college will use its funding to purchase learning materials and training technologies as well as create a partnership with CompTIA to expand IT certification programs for careers in IT and help desk positions.

8. Camden County College (Blackwood, N.J.): Founded in 1965, Camden County College is a public community college serving western central New Jersey and the greater Camden area. The college will use its funding to expand its HVAC technician training and Programmable Logic Controller Certificate of Achievement programs. Further, the college will develop a Programmable Logic Controller certificate program specifically tied to using Johnson Controls technology.

9. Georgia Piedmont Technical College (Clarkston, Ga.): Founded in 1961, Georgia Piedmont Technical College is part of the Technical College System of Georgia, serving students in the greater metro Atlanta area. The college will use its funding to purchase additional lab equipment for the Building Automation Systems program and upgrade hands-on training simulators. Further, the college will refresh its commercial refrigeration and welding programs and update related program marketing to underserved communities.

10. Milwaukee Area Technical College (Milwaukee, Wisc.): Founded in 1912, Milwaukee Area Technical College is a public, two-year vocational-technical college. The college will use its funding to expand local recruitment for HVAC career training as well as upgrade lab and training equipment.

### CERTIFIED HVAC PROFESSIONAL (CHP-5)



### LEARN AT WORK

The **Certified HVAC Professional (CHP-5)** certification pathway is a series of 5 short exams that NATE created to mirror a technician's on-the-job training.

### STUDY ONLINE

NATE has partnered with **HVACRedu.net** and **Interplay Learning** to provide technicians with online courses and virtual reality trainings that prepare technicians for each CHP-5 exam.

### CERTIFY AT HOME

Technicians can choose to take their exams from home using NATE's remote **Live Online Proctored Exams**.

Register your technicians at:

**[www.NATEX.org](http://www.NATEX.org)**

NATE is the leader in **developing** and **recognizing** professional HVACR technicians. North American Technician Excellence (NATE) is the largest non-profit certification organization for heating, ventilation, air conditioning and refrigeration technicians.

CUSTOMER SERVICE: 877-420-6283 | EMAIL: [asknate@natex.org](mailto:asknate@natex.org)





# Industry Education

## Carrier, Bryant Announce Winners of Distributors' Education Foundation Scholarships

**25 scholarships awarded to children, grandchildren and employees of Carrier and Bryant contractors.**

Carrier and Bryant have announced the 25 recipients of this year's Carrier & Bryant Distributors' Education Foundation scholarships. Recipients will receive this support for their college or vocational education during the 2021-2022 school year. Carrier and Bryant are part of Carrier Global Corporation (NYSE: CARR), the leading global provider of healthy, safe and sustainable building and cold chain solutions.

"The Carrier & Bryant Distributors' Education Foundation is an excellent resource for our contractors, and we're pleased to be able to provide support for

their scholarship recipients," said J.T. Holtschlag, Vice President, Sales and Marketing, Carrier and Bryant. "Not only does this program help the recipients prepare for their future success, it's also an effective way to help bridge the technician gap in our industry as some of them decide to enroll in vocational training. All in all, this is a special way for us to acknowledge our contractors, as they serve a vital role in our business. We greatly appreciate all that they do and say 'thank you' for their expertise and support."

Established in 1981, the Carrier & Bryant Distributors' Education Foundation was created to commemorate the late William A. Blees for his many significant contributions to Carrier distributors. Today,

the foundation continues to serve the children, grandchildren and employees of dealers and contractors while also honoring the industry's founder, Dr. Willis Carrier.

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

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

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

The 2021 Carrier & Bryant Distributors' Education Foundation scholarship recipients include:

- Ryan Anger, Sheboygan, Wisc.
- Alyssa Barker, Fishers, Ind.
- Halle Bittlinger, Hebron, Ky.
- Cassidy Bogle, Henderson, Texas
- Faith Doerr, Elkhart, Ill.
- Chloe Harber, Somis, Calif.
- Whitteny Holladay, Maylene, Ala.
- Lillian Holmer, Imperial, Mo.
- Haddie Hughes, Fond Du

Lac, Wisc.

- Jonathan Kahn, Park Ridge, Ill.
- Mary Kulis, Kent, Ohio
- Anne Leaman, Willow Street, Penn.
- Katia Marcellus, Luck, Wisc.
- Danielle Owens, Columbus, Miss.
- Elizabeth Paul, Stoutsville, Ohio
- Casandra Rausch, Lake in the Hills, Ill.
- Lane Reed, Metropolis, Ill.
- Brooklyn Rigby, Grace, Idaho
- Michaelyn Russell, Andalusia, Ala.
- Steven Van Pelt, Mohnton, Penn.

For more information about Carrier or Bryant, please visit <https://www.carrier.com/residential/en/us/> or [www.bryant.com](http://www.bryant.com).

## ASHRAE Announces 2021 Student Design Competition Winners

The winners of 2021 ASHRAE Student Design Competition and Applied Engineering Challenge were announced. The competitions encourage students to become involved in the design of energy-efficient HVAC systems – a profession that is crucial to ensuring a sustainable future for the earth.

This year's Student Design Competition focused on a new 50,000 square foot building on a higher education campus in Prince George, British Columbia, Canada. The building included a two-story cafeteria, associated office, and commercial kitchen and storage space. The teams were tasked with providing safe and healthy storage of food materials on the lower level in a manner that prevents spoiling and the growth of bacteria, while providing enough kitchen/servery space and permanent seating to serve a peak occupancy of 720 students and a total of 3,000 students per day.

Teams competed in one of the three categories:

- HVAC Design Calculations
- HVAC System Selection
- Integrated Sustainable Building Design (ISBD)

First place in the HVAC Design Calculations category was awarded to Brandon Jung, Arin Lee, Luke-ngo Miguel, Kyle Vanderhorst and Jeff Yoon of the University of British Columbia, Vancouver, British Columbia. Dr. Nima Atabaki,

P.Eng. was the team's faculty advisor. Esteban Kello, P.Eng. and SunJun Yoo, EIT were the team's industry advisors.

Placing first in the HVAC System Selection category were Cole Quinlan, Nicholas Schramski, Brian Van Schepen, Cole Weber, Evan Eldred and Jordanny Williams from Ferris State University, Big Rapids, Michigan. Joseph Pacella was the team's lead mentor.

Receiving first place in Integrated Sustainable Building Design category was Andre Cosini, Xinyan Liu, Christopher Maitski, Andrew McGrail, Roumany Phan and Christopher Unis from Pennsylvania State University, State College, Pennsylvania. William Bahnfleth, Ph.D., P.E. was the team's faculty advisor. Luke Leung, P.E. was the team's industry advisor.

In the 2021 Setty Family Foundation Applied Engineering Challenge, students were challenged to design an indoor farming system to meet the needs of a local community with regards to single or multi-family residential construction. The system could be designed for new or renovation construction types. The system took into account multiple system variables, including space temperatures, humidity, lighting, acoustics, and outdoor conditions to deter-

Continued on Page 29



**HERS Rating  
Air & Hydronic Balancing  
Permit Expediting & Retrieval**



**COMPLIMENTARY ON-SITE  
TEAM EDUCATION &  
24/7 SELF-SERVE PORTAL!**

**OUR MISSION STATEMENT -  
Providing unparalleled  
customer service and  
rapid care to our valuable  
customers is what drives  
us at Rapid Duct Testing.**

**SERVICING CALIFORNIA**

**RATED 5.0 ★★★★★  
ON GOOGLE REVIEWS**

**CONTACT:**  
Tel. 855.NEED.HERS  
[info@rapidducttesting.com](mailto:info@rapidducttesting.com)

**FOLLOW US @RapidDuctTesting**



[www.RapidDuctTesting.com](http://www.RapidDuctTesting.com)



## Growing Green Technicians Part 143: Forced Air Heating Systems and Humidification

By Jim Johnson  
Contributing Editor

Heading into fall and the winter season, it's likely that HVACR technicians will be having discussions with customers regarding their concerns about their indoor environment being "too dry" or "chilly" even though their gas furnace or heat pump system seems to be operating, but not keeping them comfortable.

Often, the customer's solution to this problem is to bump the temperature up a few degrees.... which usually means that it won't be long before they'll be reaching for the thermostat again to turn it down because it's now warmer than they want it to be in the building. And, this sequence of events repeats and repeats, which results in wasted energy.

From a green perspective, handling this situation for customers begins with a basic understanding of psychrometrics.

The customer's assumption is that their heating system is causing the air in the conditioned

space to "dry out", when in fact what is specifically occurring is that the relative humidity of the air is decreasing. One factor to consider here is that during the heating season, when the cool outside air that is necessary for ventilation and fresh air requirements is either leaking into a structure (not green) or is being brought into a building via a system designed to control air intake (green), it contains a given level of moisture. And, with that intake air warms up, it will still contain that level of moisture, and the ability of that air to hold moisture will increase, making it seem "drier."

From an energy-efficient perspective, a heating system that is not keeping the occupants comfortable due to the situation we've described above, the answer could be add a humidifier. From a fundamental perspective, there are general classes of in-duct humidifiers:

1. Atomizing humidifiers that spray a mist of atomized water through a nozzle and into the duct system.

2. Evaporative humidifiers that use a plate or rotating drum system that holds moisture, allowing it to enter the duct system when the air flow passes over the pads or the container of water.

When it comes to gas furnaces, a plate type humidifier that mounts with a flange and employs pads that are replaced regularly (see **Figure One**), or a rotating drum system (shown in **Figure Two**) will effectively humidify the air and it moves through the duct system.

However, in the case of a heat pump system, the lower supply air temperature of this type of heating equipment is typically not warm enough to cause water to evaporate effectively. In these cases, an atomized humidifier, such as the type we're showing in **Figure Three**, would be required.

Whatever the heating equipment type, adding the correct type of humidification system and employing an effective control system will result in a more even comfort level in the building, ensuring the efficient operation of the system.



FIGURE ONE



FIGURE TWO

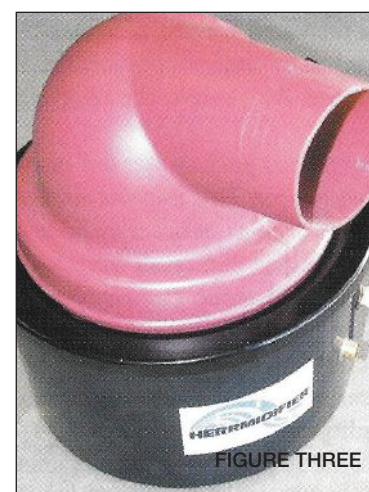
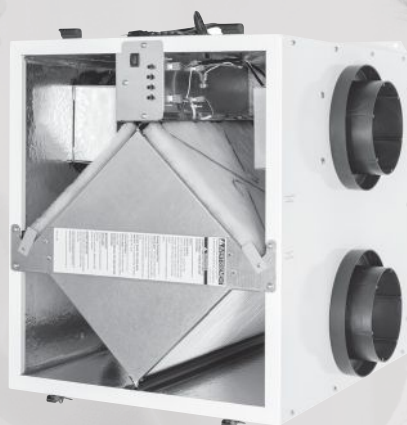


FIGURE THREE



# CLEAN. FRESH. AIR.



Meet code with the best Outside Air Solution from S&P USA -  
the new *Total Recovery Premium ERV Series*



## Little Giant Brand Celebrates 80th

Franklin Electric Co., Inc. (NASDAQ: FELE) brand Little Giant is celebrating a milestone 80th anniversary in 2021, and the company is marking the occasion with a series of initiatives planned throughout the year.

"For 80 years, Little Giant has stood the test of time, pumping a steady flow of proven reliability and superior technical know-how both through the products we offer as well as the staff and support team behind the scenes. We're excited to commemorate this anniversary with initiatives that bring our partners together," said Steve Frappier, Business Unit Manager for Little Giant.

One such initiative is a revitalized brand look that the company notes reflects the 80 years of experience in innovation, manufacturing expertise, and technical support that Little Giant provides. "Little Giant has pumped a lot of water in the past 80 years, and there is much more to look forward to in the next 80 and beyond," said Frappier.

The core product that Little

### LittleGIANT®

Giant still offers today was originally conceived in 1926, when plumber R.M. "Doc" Wolfe had an issue with the currently available pumps failing at a frustrating rate. At the time, air conditioning units were just beginning to become popular, and each unit had a pump to get water up into a screen for evaporative cooling. Every time Wolfe fixed one of these pumps, it would break again. He enlisted the help of inventor Harry Goodman to create his solution: the world's first evaporative pump. In 1941, the Little Giant Vaporizer was born – and so was the Little Giant brand. The innovative, patented pump became the cornerstone of Little Giant – and laid the foundation for a company dedicated to solving the pumping problems plumbers and HVAC professionals faced.

Decades of additional milestones followed:

- In 1950, Goodman filed a

Continued on Page 30



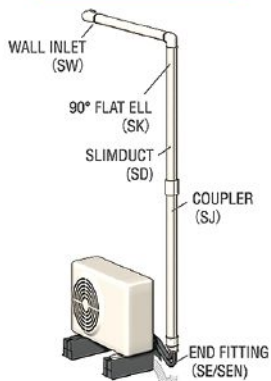
# *The protective finishing touch for your installation*

## SLIMDUCT™ SD



### Examples of Applications

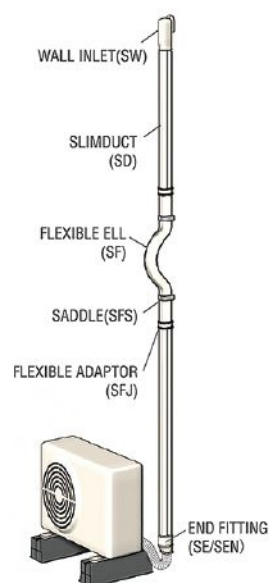
#### Basic Application



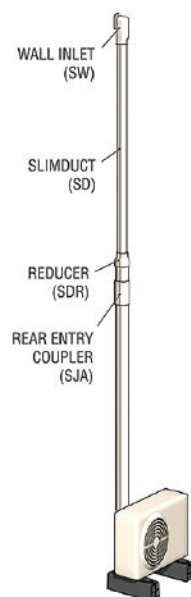
#### Horizontal Multiple Run Application



#### Application for Obstacles



#### Vertical Multiple Run Application



- Heavy duty PVC
- Weather resistant
- Flame retardant
- Available in three sizes
- Adaptable solution
- Five different colors



# New Products

## Watts Big Bubba S100



**Watts** has announced the release of its Big Bubba® S100 complete whole home filtration solution. This certified point-of-entry system gives plumbing contractors a solution for homeowners concerned about lead, PFOA, PFOS, cysts, and chlorine taste & odor in their drinking water.

Big Bubba is certified to reduce 99.62% of lead and 98.26% of PFOA and PFOS in drinking water (@ maximum of 4 GPM). It is also certified to reduce cysts, chlorine taste, and odors. In addition, a volumetric flow monitor alerts the user when filter cartridge changes are due, and a high-capacity 0.5-micron carbon block filter (84,480 gallons) is included.

“PFAS contamination continues to make headlines as it shows up in public and private water systems throughout the country,” said Neal White, Director of Sales, Watts Water Quality. “Watts is very excited to be able to bring the BB-S100 whole home filtration solution to the market at this time to help concerned consumers address this growing problem.”

**More information:** [www.Watts.com](http://www.Watts.com).

• • • • •

## Nu-Calgon PowerZyme



**Nu-Calgon** has launched PowerZyme™, a new liquid enzyme-based drain line treatment for use in the HVAC and food service markets. PowerZyme keeps drain lines flowing freely and addresses condensate and drain problems such as odors, grease, sugar snakes and more.

Easily dispensed from a flip-top spout, PowerZyme breaks up sludge organic matter and quickly eliminates odors in condensate pans and drain lines. It easily pours through standing water and will safely protect systems from build-up for up to three months.

PowerZyme liquid is available in a 32 ounce quart, as well as an

8 ounce “job size” bottle. PowerZyme Gel formulation is also available in a 32 ounce spray bottle.

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](http://www.nucalgon.com)

• • • • •

## Taco VR Series



**Taco’s** new VR Series high-efficiency ECM cast iron or stainless steel circulators offer a wide range of low, medium or high head options in sizes from 1/3 - to 2-HP. Easy, intuitive settings and operation will appeal to installers for a broad range of uses, including HVAC, hot water recirculation and NSF commercial hot applications.

00e VR circulators provide an easy-to-program pump interface with real-time feedback. Modbus, BACnet, 0-10Vdc + pulse width modulation (PWM) are standard. The circulators provide 62 feet max head and up to 320 GPM flow. They are NSF/ANSI 61 + 372 commercial hot certified.

The circulators are also equipped with ASHRAE’s 2019 Software Innovation Award-winning Taco Tags, providing vital product/application information instantly to phones or other mobile devices. Even the molded insulation shell is included.

**More information:** [www.Taco-Comfort.com](http://www.Taco-Comfort.com).

• • • • •

## RectorSeal Circuit Shield

**RectorSeal®**, Houston, a leading manufacturer of quality HVAC/R and plumbing tools and accessories and a wholly-owned subsidiary of CSW Industrials, Inc. [NASDAQ: CSWI], is a master distributor of GulfCoat™ Circuit Shield™ conformal spray coatings.

When properly applied, Circuit Shield coatings provide a clear, micro-thin acrylic coating that protects surfaces from the harmful effects of corrosion caused by environmental forces such as salty ocean air. Further, it helps to mitigate problems caused by pests such

as geckos, ants, snakes, and mice. The easy-to-apply spray offers superior adhesion and can be applied on-site during installations. Formulated to support dielectric properties, Circuit Shield coatings offer enhanced UV resistance and excellent moisture resistance to coated surfaces.

“When circuit boards fail due to corrosion like salty ocean air, it can be an expensive repair,” said Caitlin Krc, Product Manager at RectorSeal. “Additionally, outdoor pests often seek the warmth provided by a circuit board. That situation often causes a fault in the circuit board, the death of the pest, and expensive damage to the unit. Circuit Shield™ offers an additional level of protection to help extend the life of the equipment.”

Circuit Shield coatings are harmless to geckos and other pests but provide the needed barrier to reduce damage to expensive circuit boards. When properly applied, Circuit Shield spray coatings offer a uniform dry film thickness of 0.4 -1.4 mils and meet a 5B rating for crosshatch adhesion per ASTM D3359. Corrosion durability shall be confirmed through testing to no less than 2,500 hours salt spray resistance per DIN 53167 (ASTM B117) using aluminum test coupons. Dielectric Withstanding Voltage test shall pass at 1500 volts/mil thickness.

In addition to HVAC/R Printed Circuit Boards, Circuit Shield coatings can be used to protect elevator control panels, telephone communication boxes, outdoor timers and switches, traffic light and rail crossing control panes, automotive, heavy-duty, and off-highway equipment.

**More information:** [www.rectorseal.com](http://www.rectorseal.com).



• • • • •

## FEBCO ArmorTek

**FEBCO** has announced the addition of the ArmorTek™ advanced coating system to its ductile iron backflow preventer valves. This advanced patent pending technology provides three layers of protection to create an effective barrier, dramatically increasing resistance to corrosion.

According to Cameron Rapoport, Backflow Product Specialist for FEBCO, “When epoxy coating is breached, iron exposed to water corrodes, and in some

cases, bacteria can create accelerated microbial-induced corrosion, or ‘MIC’.” The ArmorTek three-pronged corrosion protection solution provides:

1. Anti-corrosion primer – An advanced primer contains an electrochemical corrosion inhibitor. It significantly slows the spread of corrosion should the metal substrate become exposed from wear or impact.

2. Microbial inhibitor – ArmorTek’s exclusive formulation inhibits the growth of bacteria that cause MIC. This further slows the spread of corrosion and limits the growth of tubercles that can clog or foul downstream equipment.

3. Robust topcoat – ArmorTek’s top layer is specially-designed to bond to the primer below, providing a high-strength barrier between the iron substrate and water.

**More information:** [www.febcoonline.com](http://www.febcoonline.com).

• • • • •

## RLS Online Training Portal



**RLS®** LLC (“RLS”), manufacturer of the first press-to-connect fittings for the HVAC and refrigeration industries, announces the launch of their new RLS Certified Installer online training program at [training.rapidlockingsystem.com](http://training.rapidlockingsystem.com). The new training portal walks HVAC/R contractors through the step-by-step process of making reliable, permanent copper tube connections using RLS press technology.

“We’re very excited to offer this comprehensive new training program for users of RLS press fittings,” said Paul Schubert, President of RLS. “The new portal explains our patented press technology, how and why it works so well, and the steps required for proper installation. Both audio descriptions and video demonstrations are used to reinforce the material and facilitate learning.”

Users must pass a series of quizzes as they work through each section of the training program, as well as a final test after completing the entire course. After passing the final test, a customized certificate of completion can be downloaded.

In conjunction with the new training program launch, RLS has also introduced a new company logo. The new design comes as the company celebrates the sixth

anniversary of the introduction of its revolutionary technology to the HVAC/R market. Originally introduced in 2015 under the Zoom-Lock® brand through a partnership with Parker Hannifin Corporation, RLS fittings are now sold exclusively under the RLS brand.

“Now that RLS press fittings have taken on their own identity in the marketplace, we felt it was time to give our logo a new look that represents our leadership position in the industry,” said Schubert. “The logo emphasizes our patented fitting design, including the unique flared ends which make it instantly recognizable as an HVAC/R fitting, setting it apart from those used for plumbing.”

RLS designs, develops, and proudly manufactures its fittings in America, at its centrally located Missouri factory. The press fittings replace the time-consuming and demanding conventional practice of manually brazing HVAC/R copper joints. RLS fittings allow for faster, more consistent connections that reduce total installed cost while also enhancing safety, since they do not require an open flame.

**More information:** [www.rapid-lockingsystem.com](http://www.rapid-lockingsystem.com).

• • • • •

## Greenheck ESD-635HP

**Greenheck’s** ESD-635HP, a 6-inch deep stationary drainable blade louver, is designed to provide high volume air flow and superior resistance to water penetration. The high-performance ESD-635HP incorporates drain gutters in the head member and each horizontal blade to channel water to the jams where it is further channeled through vertical downspouts and out at the sloped sill, protecting building air intake and exhaust openings. Available in single section sizes up to 48 in. x 48 in., the ESD-635HP provides more free area (61.5%) on these smaller sizes to complement our industry-leading ESD-635 drainable louver, and is licensed to bear the AMCA Seal for Water Penetration and Air Performance.

Manufactured of extruded aluminum, Greenheck louvers can be specified with a variety of options in a broad array of architectural finishes for durability and compatibility with adjacent components.

**More information:** [www.greenheck.com](http://www.greenheck.com).





# Green Technologies

## LG Pledges Transition to 100% Renewable Energy by 2050

**Commitment expands on zero carbo 2030 initiative.**

LG Electronics Inc. made public its commitment to transition completely to renewable energy by 2050 as a key component of its sustainability strategy. The announcement in the LG Electronics Sustainability Report comes on top of its earlier commitment to carbon neutrality through the Zero Carbon 2030 initiative in which LG has pledged to reduce carbon emissions in the production stage to 50% of 2017 standards by 2030.

The transformation will be implemented region by region starting in North America, where every office and manufacturing site will be powered by renewable energy within the year. LG manufacturing facilities outside of Korea are on target to convert 50% of their electricity needs to renewable energy in the next four years.

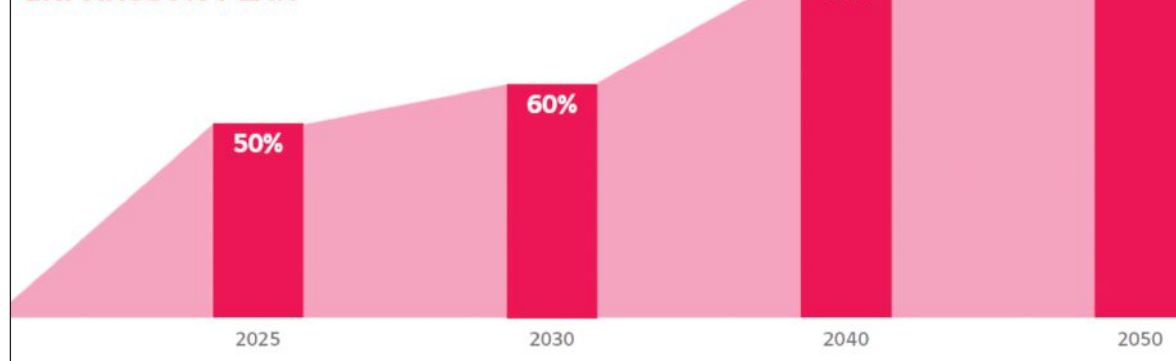
Achieving this objective globally will include installing high-efficiency LG solar panels on its buildings, utilizing power

purchase agreements that allow companies to purchase electricity directly from suppliers, utilizing Renewable Energy Credit (REC) certificates, and participating in the Green Premium program in Korea, LG's home market to purchase clean energy directly from the Korea Electric Power Corporation (KEPCO).

Currently LG is installing solar modules with a capacity of 3.2 MW on a manufacturing site in Noida, India, generating electricity to power LG's administrative office as well. This project will be expanded as a part of the Clean Development Mechanism (CDM), allowing LG to secure carbon reduction certificates from the United Nations Framework Convention on Climate Change (UNFCCC).

"Our commitment to creating a better life for all can best be actualized by LG transition to renewable energy and achieving carbon neutrality," said Park Pyung-gu, senior vice president at LG Electronics Safety & Environment Division. "In today's world, innovation doesn't just

### LG ELECTRONICS GLOBAL RENEWABLE ENERGY EXPANSION PLAN



happen in the lab, but it must also happen in our factories and plants. Today's manufacturers have a once-in-a-lifetime opportunity to give the next generation a world worth inheriting and at LG, and we take this responsibility very seriously."

LG Electronics Inc. is a global innovator in technology and consumer electronics with a presence in almost

every country and an international workforce of more than 75,000. LG's five companies – Home Appliance & Air Solution, Home Entertainment, Mobile Communications, Vehicle component Solutions and Business Solutions – combined for global sales of over \$56 billion in 2020. LG is a leading manufacturer of consumer

and commercial products ranging from TVs, home appliances, air solutions, mobile devices, monitors, service robots, automotive components. The premium LG SIGNATURE and intelligent LG ThinQ brands are familiar names world over.

Visit [www.LGnewsroom.com](http://www.LGnewsroom.com) for the latest news.

## Propane Education & Research Council Launches National Brand for Propane

The Propane Education & Research Council (PERC) launched a new identity for propane that signals a seismic change in how to view this reliable energy source.

The new brand, PROPANE Energy for Everyone™, highlights propane's role in ensuring energy equity and reducing carbon emissions.

"Americans are beginning to appreciate the value of propane in a wider energy mix after seeing the vulnerabilities of the electric grid in Texas and California and around the country," says PERC President and CEO Tucker Perkins. "Propane is clean, affordable, and available right now. Unlike the electric grid, it does not require trillions of dollars in infrastructure investment that will create a burden on those who can least afford it. Propane offers solutions for climate, health, and equity."

The PROPANE Energy for Everyone™ brand was created by PERC's newly selected creative agency of record, Elevation Advertising, after a competitive review. It is rolling out to propane industry partners in anticipation of consumer and market-specific



campaigns this fall.

"As we familiarized ourselves with the energy sector as part of the competitive review, we realized that propane has a remarkable story that's not being told," says Elevation's co-founder and executive creative director, Aaron Dotson. "Propane is part of a clean energy mix that complements other renewable systems to help reduce carbon emissions today, right now. With the national energy conversation shifting more toward sustainable solutions every day, it's the perfect time to share propane's story."

The PROPANE Energy for Everyone™ brand was the top performer in testing with homeowners, business owners, energy influencers, and propane professionals. Millions of Americans use propane for heat, hot water, cooking, and power generation at home and at work. It is also a popular fuel for school buses, emergency first-responder equip-

Continued on Page 34



# Sierra Truck Center

## Chevrolet Commercial Vehicles

Your One Stop Shop for Light & Medium Trucks and Vans



## 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](http://www.SierraTruckCenter.com)  
1621 South Magnolia Ave. Monrovia, CA 91016





# Case Studies

## Venstar's Skyport Cloud Services Provide HVAC Control and Much More for L.A. School

*Challenge: Remotely Manage HVAC Systems and More*

Chet Galland is the director of Facilities at the Berkeley Hall School, a prestigious 100+ year-old pre-K through grade 8 independent school in Los Angeles. Galland is responsible for the management and maintenance of campus facilities encompassing 80,000 square feet of buildings across 66 acres.

Galland wanted to find thermostats that could be remotely managed using a system that gives him remote control of the school's HVAC units. His goal was to manage and reduce energy usage and costs from his desktop computer or iPad. He also wanted to be able to remotely control and set timers for the schools' circulating pumps to ensure indoor comfort while managing energy usage during off schedule events.

*Solution: Venstar Skyport Cloud Services*

Galland chose Venstar's Col-orTouch® and Explorer® Mini thermostats, which are managed by Venstar's free Skyport® Cloud Services and mobile app.



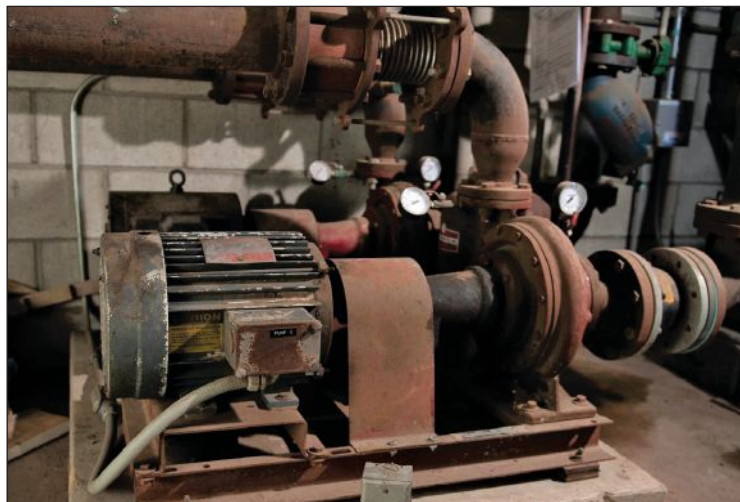
CHET GALLAND, DIRECTOR OF FACILITIES, BERKELEY HALL SCHOOL.

Features include:

- Remote control of HVAC via Skyport website or mobile device
- Ability to set timers to turn on/off the hydronic circulating pump system
- Utilization of Skyport as a remote timer switch for exterior lighting
- Global changes feature across the entire system
- Setpoint limiting to reduce tampering with thermostats

*Results: Greater Control of HVAC Units and Related Systems*

Venstar's Skyport Cloud Services provides control of units and related systems, including the school's



BERKELEY HALL'S HYDRONIC CIRCULATING PUMP.

hydronic circulating pump system to help ensure indoor comfort.

Results include:

- Flexibility to control HVAC at individual buildings or areas
- Remote control of the school's thermostats
- Capability to nest schedules within the overall schedule
- Ability to program fans based on occupied/unoccupied status
- Global changes to save time versus manual changes
- Global messaging to classrooms for announcements and

reminders

- Timer control of the hydronic circulating pump system
- Ability to control and set on/off schedule for exterior lighting

Future uses include scheduling timers for exhaust fans, outdoor lighting and even security for perimeter door lockdown.

Located in Los Angeles, Berkeley Hall School is a private, coeducational school for students in preschool through grade 8. Rigorous academics in a supportive atmosphere and grounded char-

acter development allow students to become fearless scholars and conscientious citizens as well as gain a love of learning, leadership, social responsibility and creativity with moral integrity, self-esteem and compassion for others and the environment.

Founded in 1992, Venstar Inc. is a leading thermostat and energy management system (EMS) manufacturer, known for providing value to its customers via ease of use and installation, proven cost savings, improved energy efficiency, quality and reliability. Venstar is one of the largest thermostat suppliers in the world and designs and produces Venstar-branded products, as well as OEM thermostat products for the biggest names in HVAC. Venstar's Surveyor is a leading energy management system, typically saving small-box retailers 25–35 percent of their energy costs, which translates to tens of millions of dollars in savings each year and dramatic reductions in CO2 emissions. Surveyor currently controls the energy usage of 30,000+ retail locations across the United States, Canada, Puerto Rico and Mexico.

## Features

## Carrier Gains Momentum as it Helps K-12 Students Return Safely to Schools Amid Pandemic

As thousands of school districts across North America prepare for students to return, Carrier Global Corporation (NYSE:CARR), the leading global provider of healthy, safe, sustainable and intelligent building and cold chain solu-

tions, is providing solutions and services to schools that will help support building and occupant health, cognitive performance and energy efficiency. In the first half of 2021, school districts across North America have purchased Carrier

Healthy Buildings solutions, including more than 18,000 Carrier OptiClean™ Dual-Mode Air Scrubber & Negative Air Machines. This is part of Carrier's more than \$500M active pipeline in its Healthy Buildings Program and the multibillion-dollar opportunity the company sees in the K-12 segment over the next few years.

Carrier's solutions for K-12 schools include ventilation and filtration technologies, controls, services and touchless products. In addition to supporting mitigation against disease transmission, improved indoor environments can also improve thinking. High CO2 levels, which can occur in crowded classrooms with poor ventilation, have been proven to impact brain-based skills. According to the COGfx study, people perform twice as well when indoor environments are optimized through high ventilation, low CO2 and low volatile organic compounds. Test scores on cognitive function were highest in the areas of information usage, strategy and crisis response. In some

cases, nearly 300% higher.

"Carrier understands the specific needs of the K-12 segment and is committed to helping create healthier, safer and more productive environments for students and staff. The momentum we're seeing is strong, and we believe it's attributable to a greater understanding of the long-term benefits of healthy buildings," said Ajay Agrawal, Senior Vice President, Global Services & Healthy Buildings, Carrier. "With the right strategies in place, better thinking and better health can be achieved inside healthier schools."

In Arizona, Carrier will be providing more than 800 HVAC units to multiple buildings in a district that serves more than 35,000 students. The products, which are a variety of packaged HVAC systems, will help to improve indoor air quality and comfort in classrooms throughout the district. In California, students will be more comfortable through the installation of more than 100 Carrier WeatherMaster packaged rooftop units (RTUs), which are more efficient than prior units. Fund-

ing for both projects was partially provided by the American Rescue Plan's Elementary and Secondary School Emergency Relief Fund (ESSER Fund), which provides funding dedicated to K-12 schools, including improvements to HVAC systems and ventilation.

In the Richmond Public Schools district in Virginia, more than 25,000 students can breathe easier this fall with the installation of more than 1,500 Carrier OptiClean Dual-Mode Air Scrubber & Negative Air Machines to help purify the air in classrooms across the district. And in Texas, administrators in the Texas City Independent School District are investing in the health of their students and faculty with a multimillion-dollar order for chillers, air handling units, and controls for La Marque Middle School, which is currently under construction. The order will create a state-of-the-art HVAC system that will help promote proper ventilation and air quality in the school.

To learn more about the K-12 offerings, visit [corporate.carrier.com/healthybuildings](http://corporate.carrier.com/healthybuildings).

**WANT TO SAVE ON CRANE COST?**

# PRO-LIFT

**LIGHTWEIGHT  
AIRCRAFT  
ALUMINUM**

**PATENT  
PENDING**

**EASY TO OPERATE  
BATTERY  
OPERATED**

**CALL TODAY (972) 939-3231 • WWW.PRO-LIFT.COM**



# Troubleshooting

## A Reach-in Freezer That's Not Keeping Product Frozen

By Jim Johnson  
Contributing Editor

In this troubleshooting situation, a restaurant manager is calling for service on a reach in freezer, and the complaint is that the unit “isn’t freezing things hard.”

When you arrive, you confirm that the equipment, which is designed to have a box temperature of 0 to 5° F, is maintaining a temperature near 35°F. You also note that the compressor, condenser fan motor, and evaporator fan motor are all operating.

As your first step in evaluating this situation, you check the condenser coil and find it to be clean. When you check the condition of the indoor coil, you find that it is clogged with frost. When you check the schematic diagram shown in **Figure One** (note the legend in **Figure Two**), you determine that this equipment is designed to defrost on a time schedule, and when the timer

advances to the defrost mode, a normally closed switch wired in series with the compressor opens, and a normally open switch wired in series with the defrost heater closes.

Following the manufacturer’s recommended procedure, you manually initiate a defrost mode and find that:

1. An ammeter check of the defrost heater circuit shows the proper current draw.
2. A voltage check at the DFTM connections shows the proper voltage.
3. The evaporator fan motor does not shut down when the defrost cycle is initiated.

Your troubleshooting question: *What is the next step you need to take in servicing this equipment?*

If you believe you have the correct answer to one of Jim Johnson’s Troubleshooting Problems, please submit it by email to Jim Johnson at icntrouble-

CFM.....Condenser Fan Motor  
COMP.....Compressor  
DFH.....Defrost Heater  
DFTM.....Defrost Timer Motor  
DTS.....Defrost Termination Solenoid  
DTT.....Defrost Termination Thermostat  
EFM.....Evaporator Fan Motor  
FCS.....Fan Cycling Switch  
FL.....Fusible Link  
HPS.....High Pressure Switch  
LPS.....Low Pressure Switch  
CFMRC.....Condenser Fan Motor Run Capacitor  
COMPRC.....Compressor Run Capacitor  
TH.....Thermostat

FIGURE 2

shooting@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.”

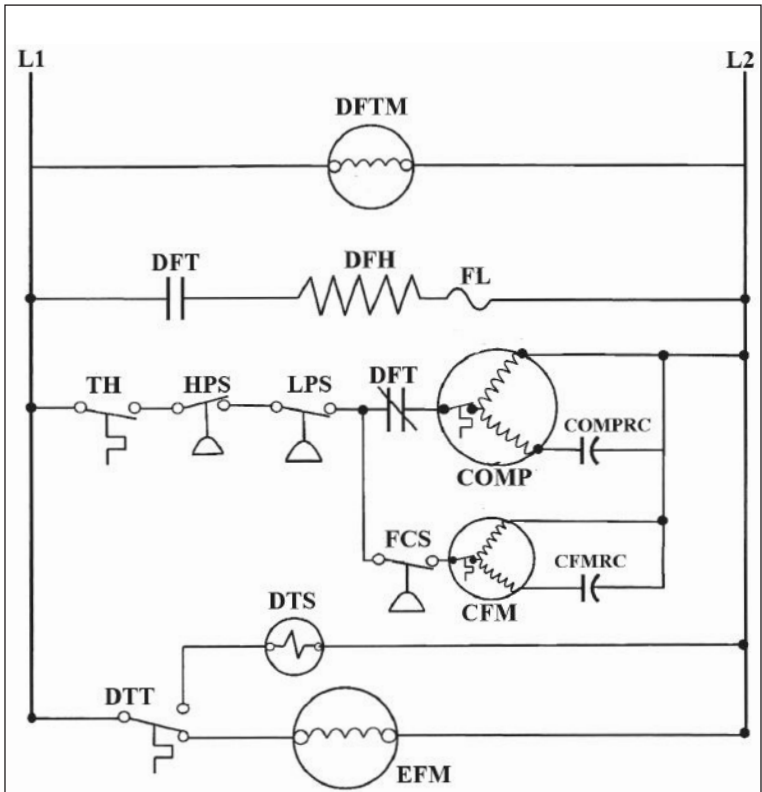


FIGURE 1

### Answer to Last Month's Troubleshooting

The next step we need to take to get this equipment operating again is to replace the Outdoor Fan Contactor. Our voltage checks showed that the OFC coil was energized with the proper operating voltage, but that the OFC contacts were not closing to complete the circuit to the outdoor fan motors.

The winner of last month's Troubleshooting is:

**Jake Olivas**  
California Air Control, Inc.  
Covina, Calif.

### ASHRAE Competition Continued from Page 23

mine the best course of action to be integrated into a residence.

Adam Bessey, Ryan Salazar and Matthew Malonzo from California Polytechnic State University, San Luis Obispo, California received first place. Steffen Peuker, Ph.D. was the team's faculty advisor.

The projects will be recognized during the 2022 ASHRAE Winter

Conference, January 29 thru February 2 in Las Vegas, Nevada. The Winter Conference is held in conjunction with the ASHRAE co-sponsored AHR Expo, which will be January 31 through February 2 at the Las Vegas Convention Center.

For a full list of Student Design Competition winners (First, Second, Third and Rising Star), please visit the Competitions page on ashrae.org.

## SHORT ON SPACE?

The Ruud® Sound & Space Constraint Solution is ideal for applications where a traditional condenser just won't fit. The side discharge heat pump allows for flexible installation in tight outdoor locations, including zero lot line boundaries, multifamily housing, condominiums and rooftop terraces. So when the install challenge calls for a small solution, this one really fits.



Sound and Space  
Constraint Solution

### System Benefits At-A-Glance

**COOLING EFFICIENCY:**  
19 SEER / 12 EER

**HEATING EFFICIENCY:**  
10.7 HSPF

**OUTDOOR SOUND LEVEL:**  
Levels as low as 53 dB(A) contribute to extremely quieter operation than conventional HVAC systems

**HEAT PUMP COMPRESSOR:**  
Variable-speed, inverter-driven rotary compressor

**AIR HANDLER MOTOR:**  
Constant CFM variable speed modulating airflow

**AIR HANDLER EVAPORATOR COIL:**  
All-aluminum

**OPTIONAL ELECTRIC HEAT:**  
Thermostat (Model No. RXRSRY or RXRNRUZ\*) required as a tool to configure electric heat and other function codes

**LIMITED WARRANTY<sup>1</sup>:**  
Parts — 10-year

<sup>1</sup>For complete details of the limited and conditional warranties, including applicable terms and conditions, see product literature.



RELY ON RUUD.™



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





MICHELLE THOMAS

Mitsubishi Electric Trane HVAC US (METUS), a leading supplier of Ductless and Ducted Mini-split and Variable Refrigerant Flow (VRF) heat-pump and air-conditioning systems, announces the promotion of **Michelle Thomas** to vice president, human resources.

In her new role, Thomas is responsible for the company’s human resources strategies and employee engagement. In addition, she leads METUS talent acquisition, development and retention initiatives. She also reinforces a culture of high performance through effective communication of strategic vision, objectives, and business results.

“Over the years, Michelle has been a tremendous asset to our team. Her expertise in human resources strategies supports the high-performance culture that is key to the continued growth and success of our company and employees,” said Mark Kuntz, chief executive officer, Mitsubishi Electric Trane HVAC US.

Thomas joined the Mitsubishi Electric human resources team in July 2013. She served an essential role during the 2018 creation of Mitsubishi Electric Trane HVAC US, where she established benefits and policies for the new organization. Before joining METUS,

she served as senior vice president, human resources and talent management at Turner Broadcasting System, Inc.

Thomas holds a Bachelor of Science in merchandising from the University of Georgia and a Senior Professional in Human Resources (SPHR) certification from the Human Resources Certification Institute.

.....



BEN DENNIE



BRENNAN VAUGHN

Nationwide Coils announced two new team members offering on-site support: **Ben Dennie**, newly appointed account manager and designer III, will represent the Tennessee River Valley and greater Mid-South regions, and **Brennan Vaughn**, newly appointed account manager, will represent the Greater Houston area.

Dennie brings more than 20 years

of experience to Nationwide Coils. Brennan Vaughn also brings years of hands-on experience.

“This is an exciting time for Nationwide Coils,” said Ross Stephens, president of Nationwide Coils. “Although we have always served commercial coil needs across the country, our two new team members allow us to deliver hands-on, personalized service in two key, growing markets. Their extensive experience and professionalism will prove invaluable as we grow our client base.”

Dennie and Vaughn join Ross Stephens, president; Stephen Barzelatto, vice president; Jay Feldman, national account manager; James Filauro, New York Tristate area account manager; Andre Ostacoli, inside sales manager; and Chris Wright, Chicago account manager in leading the sales and service team of Nationwide Coils.

.....

CASPR Group has appointed **Charlie Suiter** as its new vice president of distribution development.

Suiter has experience overseeing companies’ day-to-day operations; managing key accounts; and recruiting, training, and supervising on- and off-premises sales teams. He will lead an internal sales team as well as the network of North American distributors CASPR uses to sell its products.

“We’re thrilled to add Charlie to our management team,” said CASPR Group CEO Scott Wheeler. “His long experience in managing sales and distribution logistics will be an asset as he leads the development of our distribution team.”



CHARLIE SUITER

Suiter took on his new role in late March.

“I believe in what CASPR is doing and I recognize that our unique, proprietary technology is the superior solution to continuously eliminate viruses, bacteria, and molds from indoor air and surfaces,” Suiter said. “I’m looking forward to growing our sales and distribution network and driving awareness around our industry-leading, standard-setting products.”

.....

American Residential Services (ARS) announced **Filip Wojcikowski** has been named the company’s new senior vice president and head of corporate development, reporting to ARS CEO Scott Boose.

As head of corporate development, Wojcikowski will help shape the company’s acquisition strategy; maintain relationships with external partners; and source, negotiate, structure, and execute strategic acquisitions and investments across the business.

“With over 20 years of M&A experience, 70 completed acquisitions, and a proven track record, Filip will be instrumental to the acceleration of our growth strategy,” said Boose. “In his role, Filip

will target key regions and product verticals to evaluate, analyze, and execute mergers, acquisitions, and strategic investments enabling ARS to expand our position as the leader in our industry.”

Prior to joining ARS, Wojcikowski was most recently a senior vice president, Development, at Summit Materials Inc. Prior to that, he served as senior vice president, Development, at CRH Americas. Filip started his career as an investment banking analyst at J.P. Morgan in New York.

Filip graduated from Rutgers University, School of Business in New Brunswick, New Jersey, with a Bachelor’s degree in Finance. He resides in Park City, Utah, with his wife and two children.



FILIP WOJCIKOWSKI

.....

Cold Craft Inc. announced the hiring of **Daryl Demanawa** for director of operations. Demanawa will have the primary responsibility for the success of field operations.

“We are thrilled to have Daryl on board to bring a fresh look at our 30-year operation,” said Kent Penning, president and founder of Cold Craft Inc.

Continued on Page 34

Duct Leakage Testing?



www.VentCapSystems.com

Little Giant 80th

Continued from Page 24

patent for what was to become the iconic Little Giant submersible water pump. This upgraded Little Giant Vaporizer Pump could be used anywhere water recirculation was an issue: both underwater and on dry land.

• Later in the 1950s, the company developed the C2 and C3 pumps, signaling their entrance into the condensate pump business.

• In the early 1960s, Little Giant entered the high-flow drainage pump market with the introduction of sump pumps. The 1/3 HP 8 Series sump pump was the first to launch, appearing

in the 1964 Little Giant catalog. A year later in 1965, Little Giant added the smaller 1/3 HP 6 Series sump pump and a larger 1/2 HP 10 Series. While the market has evolved over the years, the iconic 6 Series continues to be a top-performing sump pump throughout the industry.

• Innovation continued throughout the 80s and 90s as the company released more options for sump, sewage, effluent, aquarium pumps, sewage basins, pool cover pumps and decorative outdoor living products for the landscaping industry.

• The creation of the VCMA series in 1999 led to an entire next generation of Little Giant condensate pumps that are still being used today, including additional

standard condensate removal pumps, low profile condensate removal pumps, in-pan condensate removal pumps, plenum and high-temperature pumps, mini-split pumps, and specialty pumps like evaporative cooler pumps and ice machine replacement pumps.

• Grinder pumps hit the market in 2000, creating even more Little Giant solutions for wastewater and HVAC professionals.

“It all started with a problem noticed by a plumber, and today Little Giant is solving the problems of contractors, distributors, and homeowners around the world,” said Frappier. Visit little-giant.com to learn more about the Little Giant brand and other ways the company is celebrating the 80th anniversary.



# IHACI

## 41<sup>st</sup> Annual HVAC/R/SM Performance Contracting Product & Equipment Trade Show

### EXHIBITORS LIST

---

3M	Global/HVAC Master Distributor	Rotobrush International
AC Pro	GoGreen Financing	Rottiers Sales
Action Duct	GREE	Royal Service Supplies
Air Scrubber by Aerus	HERS Raters, LLC.	Royal Truck Body
A-Gas	Howard Industries	RSES/CARSES
Airex Manufacturing	Inaba Denko, A Division of	Service Roundtable
Airzone North America	Patlite (U.S.A.) Corporation	Sigler, Inc.
Albritton Company	iPermit ERaters	Sirris Abatement
Alliance Environmental	J.B. Warranties	Southern California Pipe Trades
Arzel Zoning Technology, Inc.	Kwik Model 3D	So Cal Sheet Metal Apprenticeship Local 105
Aspen Manufacturing	Mainstream Engineering	So Cal Gas
Baker Distributing Company	MarketAir	Soleus Air
Brownson Technical School	National Comfort Institute (NCI)	Style Crest, Inc. - Revolv
CalCERTS, Inc.	NEBB	Sealed Unit Parts Co.
CHEERS	North American Technician Excellence (NATE)	Technology & Equipment for Clean Heating (TECH)
Coilmen Plus/Modine Electrofin	Olimpia Splendid U.S.A	Thermaflex
Danko Mechanical Sales Company	Pacific Systems Group	TruTech Tools, LTD
Denco	Packard	TSI Incorporated
Emerson-White Rodgers	Panasonic Life Solutions	Uniweld Products, Inc.
Energy Code Ace	Parker Hannifin - Sporlan Division	US Air Conditioning Distributors
Energy Masters	Profit Rhino Powered by Callahan Roach	Visual Service by IHACI (VS)
ESCO Institute & HVAC Excellence	R.E. Michel Company	Walter's Mercedes-Benz Sprinter of Riverside
Evergreen Telemetry	Rapid Duct Testing	Wright Sales Co.
Ferguson HVAC	Resideo	ZONEFIRST Zone Controls
Fieldboss	Robertshaw	
Fieldpiece	Rodman Tools	
Flaretite		
Geary Pacific Supply		



# 2021 TRAINING

CALIFORNIA QUALITY INSTALLATION, QUALITY MAINTENANCE AND QUALITY SERVICE

**SOCALGAS, DOWNEY**

**SOUTHERN CALIFORNIA EDISON, IRVINDALE**

**PACIFIC GAS AND ELECTRIC, SAN JOSE**

## SEPTEMBER

### **NATE Core & Gas Heating Training**

(Four-Night Class)

Instructors: Mike Griffin / John Dalton

Tues., Sept. 7 – Part 1

Tues., Sept. 14 – Part 2

Tues., Sept. 21 – Part 3

Tues., Sept. 28 – Part 4

## OCTOBER

### **NATE AC/HP Refrigeration & Air Distribution Training**

(Four-Night Class)

Instructors: Mike Griffin / John Dalton

Tues., Oct. 5 – Part 1

Tues., Oct. 12 – Part 2

Tues., Oct. 19 – Part 3

Tues., Oct. 26 – Part 4

**IHACI**

## SEPTEMBER

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

(Four-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., Sept. 15 – Part 1

Thurs., Sept. 16 – Part 2

Wed., Sept. 22 – Part 3

Thurs., Sept. 23 – Part 4

## OCTOBER

### **Air Distribution Module**

(Four-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., Oct. 20 – Part 1

Thurs., Oct. 21 – Part 2

Wed., Oct. 27 – Part 3

Thurs., Oct. 28 – Part 4

## NOVEMBER

### **Non-Res ATE Training**

(Two-Night Class)

Instructors: Mike Griffin / John Dalton

Mon., Nov. 1 – Part 1

Thurs., Nov. 4 – Part 2

### **Non-Res MATT Training**

(Two-Night Class)

Instructors: Mike Griffin / John Dalton

Mon., Nov. 15 – Part 1

Thurs., Nov. 18 – Part 2

## SEPTEMBER

### **System Diagnosis**

(Four-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., Sept. 15 – Part 1

Thurs., Sept. 16 – Part 2

Wed., Sept. 22 – Part 3

Thurs., Sept. 23 – Part 4

## OCTOBER

### **NATE Core & Gas Heating Training**

(Four-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., Oct. 7 – Part 1

Thurs., Oct. 8 – Part 2

Wed., Oct. 14 – Part 3

Thurs., Oct. 15 – Part 4

## NOVEMBER

### **NATE AC/HP Refrigeration**

### **& Air Distribution Training**

(Four-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., Nov. 3 – Part 1

Thurs., Nov. 4 – Part 2

Wed., Nov. 10 – Part 3

Thurs., Nov. 11 – Part 4

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

**All Classes Are Being Offered Online**

**Classes begin at 6:00 PM Pacific Time and end at 9:00 PM**

**Register at [www.ihaci.org](http://www.ihaci.org)**



IONING INDUSTRIES, INC.  PRESENTS

# CLASS SCHEDULE

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

PACIFIC GAS & ELECTRIC COMPANY, STOCKTON

SOUTHERN CALIFORNIA EDISON, TULARE

SAN DIEGO GAS & ELECTRIC

## SEPTEMBER

### System Diagnostics Module

(Two-Night Class)

Instructors: Mitch Bailey / TBA

Sept. 15 – Part 1

Sept. 16 – Part 2

Sept. 22 – Part 3

Sept. 23 – Part 4

## OCTOBER

### Gas Heating Training

(Two-Night Class)

Instructors: Mitch Bailey / TBA

Oct. 20 – Part 1

Oct. 21 – Part 2

Oct. 27 – Part 3

Oct. 28 – Part 4

## NOVEMBER

### AC/HP Refrigeration

(Two-Night Class)

Instructors: Mitch Bailey / TBA

Nov. 3 – Part 1

Nov. 4 – Part 2

Nov. 10 – Part 3

Nov. 11 – Part 4

## SEPTEMBER

### System Diagnostics Module

(Four-Night Class)

Instructors: Mitch Bailey / TBA

Wed., Sept 1 – Part 1

Thurs., Sept 2 – Part 2

Wed., Sept 8 – Part 3

Thurs., Sept 9 – Part 4

## OCTOBER

### NATE Core & Gas Heating Training

(Four-Night Class)

Instructors: Mitch Bailey / TBA

Mon., Oct. 18 – Part 1

Tues., Oct. 19 – Part 2

Mon., Oct. 25 – Part 3

Tues., Oct. 26 – Part 4

## NOVEMBER

### NATE AC/HP Refrigeration

& Air Distribution Training

(Four-Night Class)

Instructors: Mitch Bailey / TBA

Mon., Nov. 1 – Part 1

Tues., Nov. 2 – Part 2

Mon., Nov. 8 – Part 3

Tues., Nov. 9 – Part 4

## SEPTEMBER

### Chiller Module

(Two-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., Sept. 1 – Part 1

Thurs., Sept. 2 – Part 2

### Commercial Cooling Tower Module

(Two-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., Sept. 8 – Part 1

Thurs., Sept. 9 – Part 2

## OCTOBER

### Boiler Module

(Two-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., Oct. 6 – Part 1

Thurs., Oct. 7 – Part 2

### Commercial Refrigeration Module

(Two-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., Oct. 13 – Part 1

Thurs., Oct. 14 – Part 2

## NOVEMBER

### NATE Core & Gas Heating Training

(Four-Night Class)

Instructors: Mike Griffin / John Dalton

Tues., Nov. 2 – Part 1

Wed., Nov. 3 – Part 2

Tues., Nov. 9 – Part 3

Wed., Nov. 10 – Part 4

## DECEMBER

### NATE AC/HP Refrigeration & Air Distribution Training

(Four-Night Class)

Instructors: Mike Griffin / John Dalton

Wed., Dec. 1 – Part 1

Thurs., Dec. 2 – Part 2

Wed., Dec. 8 – Part 3

Thurs., Dec. 9 – Part 4

Offered as Webinars

and are subject to change

[www.ihaci.org](http://www.ihaci.org) (Training)

COSPONSORED BY

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





Continued from Page 30

Demanawa joined the firm with credentials from studying to be a mechanical engineer in the Philippines in 2004, to previous employment honing his skills and instruction experience at another HVAC firm, J&J Air Conditioning. Demanawa also comes with credentials from SVCTE.



DARYL DEMANAWA

**Donald Decker** has joined International Environmental Corp. (IEC) as the vice president of sales in Oklahoma City. “We will promote IEC’s reputation with growth through new and existing markets by building new relationships with our channel partners,” said Decker. “2020 was a year of challenges for many in the HVAC industry with lessons learned. However, 2021 is a year of opportunity and we will use those experiences to position IEC for participation in the new landscape and market rebound by differentiating ourselves from our competitors.” Decker brings more than 20 years of sales experience to his IEC position in a multitude of roles ranging from national accounts management to sales management and leadership. Decker was most recently with LG Electronics as the national director of corporate

accounts. “IEC’s proven track record of providing innovative and customized solutions within the hospitality, education, multi-family, and healthcare markets will thrive with new market opportunities and innovative products,” said Decker. “The IEC culture and legacy were built by delivering customer expectations through designing, manufacturing, and delivering products to the HVAC industry and I’m excited to be a part of it.”



DONALD DECKER

Jim Cooper, president/chief operating officer of Canarm Ltd., announced the promotion of **Sean McDowell** to vice president of Canarm’s HVAC Business unit. Doug Matthews, Canarm vice president of HVAC, has announced his retirement in the coming few years. In his new position, McDowell will be responsible for HVAC sales,



SEAN MCDOWELL

marketing, product development, manufacturing, sourcing development, and strategy. McDowell, an electrical engineer with a professional engineer designation, comes from Procter & Gamble. He will retain his responsibilities for all Canarm manufacturing plants in Canada, which also includes the Agricultural business unit.

IAC Supply Solutions Inc. recently hired **Kelly McLure** as a sales specialist. In this role – a new position at IAC – she will be responsible for developing IAC’s outbound teleselling strategy. McLure will also work with IAC’s marketing team to develop targeted campaigns to drive business growth. Her cross-functional role will provide support to IAC’s industrial supply and construction segments across all IAC territories. McLure brings more than ten years of sales experience to the IAC team. Before she joined IAC, McLure worked as a senior national account executive for a building automation and HVACR distributor in Bartlett, Tennessee. Her experience also includes senior sales and management positions with mechanical and plumbing contractors. “Kelly’s professional experience in sales and relationship management, as well as her organizational skills and technical knowledge,



KELLY MCLURE

are sure to prove beneficial as we develop our teleselling approach,” said Darrell Smith, president of IAC. “Her focus on customer service and partner relationships will be a key part of making sure our business strategies support our customers in the best way possible.”



JOHN CONWAY

Redwood Services announced that **John Conway** has joined Redwood as its chief operating officer to help guide and direct Redwood’s strategy of identifying, acquiring, and growing partner companies. Conway was most recently a part of the member-owned Nexstar Network, where he spent the past six years as an HVAC coach and resource. “As a recognized and well-respected leader in the industry, John’s personal relationships with some of the best HVAC owners and operators in the country, as well as his depth of knowledge, should help us continue to attract and provide unmatched ongoing support to Redwood partner companies,” said Richard Lewis, CEO of Redwood Services. “In addition to his experience as both a successful operator and strategic leader, John shares a passion for people – the cornerstone of Redwood’s focus. We are very excited to welcome him to the team.”

Conway has been involved in the HVAC and plumbing industries for more than 27 years. He began his career in Memphis working for his father’s small HVAC company in 1994. In 1998, he purchased the business, growing it to \$10-million-dollar in sales by 2010. After selling the business in 2010, John remained with the company as general manager and grew annual revenues to over \$20 million. “I am thrilled to join Redwood Services and help deliver on the dream of building a network of passionate, people-focused companies,” said Conway. “We see so much opportunity to attract likeminded owners and operators to join us in delivering a better service experience for their customers. Redwood can provide the capital

and expertise for our partners to expand their markets by providing quality customer focused service with trained technicians and state-of-the-art equipment.”

**Dr. Barry Arkles**, Gelest, Inc. Chair, Founder and CEO, is elected to membership in the National Academy of Engineering (NAE). Election to the NAE is “among the highest professional distinctions accorded to an engineer.” Dr. Arkles is recognized for his “contributions to organosilicon materials and organometallic and biochemical reagents.” Dr. Arkles contributed scientific advances and inventions with positive impacts extending beyond the professional community to the global public. His record of innovation and accomplishments in applied materials science, surface chemistry and biotechnology is demonstrated by his contributions to medical devices, such as contact lenses, and semiconductor fabrication, particularly ILD (interlayer dielectrics) and interconnect metallization. NAE membership recognizes outstanding individuals who have contributed to “engineering research, practice, or education, including ... significant contributions to the engineering literature” and to “the pioneering of new and developing fields of technology, making major advancements in traditional fields of engineering, or developing/implementing innovative approaches to engineering education.” “Dr. Arkles’s election to NAE membership recognizes the value of the characteristic hybrid chemicals technology he and Gelest have cultivated,” said Mitsubishi Chemical Corporation (MCC) President and CEO Masayuki Waga. “We are proud of his achievement.” Dr. Arkles is a recipient of the American Chemical Society 2020 Frederic Stanley Kipping Award in Silicon Chemistry and a Fellow of the British Royal Society of Chemistry. He holds a B.S. in chemistry and Ph.D. in biochemistry at Temple University in Philadelphia.



DR. BARRY ARKLES

Propane Council

Continued from Page 27

ment, high-end restaurants, remote farms, and countless other applications. “That’s why propane is energy for everyone,” adds Dotson. “Because everyone deserves access to energy. Everyone.” “The Pro-Energy Icon that forms part of the logo is designed to recall the many users and uses of propane,” Dotson says. “But it’s also calling to mind a stylized landscape of the cleaner world it’s helping to create.”

The new brand platform is being introduced to national propane providers and state associations with video, direct mail, and marketing collateral that they can use to communicate the benefits of propane to their customers. “The many propane industry volunteers who helped us choose a new agency and develop the new brand proved themselves to be extremely strategic thinkers,” says Erin Hatcher, senior vice president of marketing and communications at PERC. “With their help, Elevation accomplished an incredible amount of thoughtful work in a short amount of time.

We’re excited to be forming this partnership as we continue to educate people about the many benefits of clean propane, the energy for everyone.” Authorized by the U.S. Congress in 1996, PERC is a Washington, D.C.-based not-for-profit charged with leading propane safety and training programs. With collaboration and funds from the propane industry, the organization also invests in research and innovation for propane applications in the transportation, agriculture, power, residential, and commercial construction sectors.



Help Wanted



**Company Overview:**  
The R.E. Michel Company was founded in Baltimore, Maryland in 1935 as a supplier to the home heating oil burner industry. Still family owned and operated, we have grown to be one of our nation's leading wholesale distributors of HVACR equipment, parts and supplies and we have more than 250 locations nationwide.  
For consideration, apply on our career page at REMICHEL.COM  
Benefits include:  
• Competitive pay  
• Medical, Dental, Vision, Disability, 401K, Life and MORE!  
  
**Branch Manager Needed for Santa Maria, CA.**  
Responsible for effective and profitable management of personnel, inventory and customer service. Working with Regional

Help Wanted

Managers and sales representative to establish and meet sales goals, in addition to hiring, developing and training personnel.

**Hiring: Outside Sales Professionals**  
Union City, CA, Fresno, CA and San Jose, CA  
Responsibilities include:  
• Calling on accounts  
• Developing and building strong customer relationships  
Minimum Qualifications:  
• 3 years sales experience required  
• Knowledge or experience in HVACR required  
• Valid Driver's License and reliable vehicle is a must  
• Excellent people, communication and computer skills

**Hiring: Counter Sales and Warehouse/**  
Drivers for Van Nuys, CA!  
Multiple openings available!  
• Understand of heating and cooling matrix  
• Basic math skills  
• Knowledge of material handling equipment  
• Valid driver's license, safe driving record

.....

Help Wanted

**CalCERTS – Compliance Specialist**  
CalCERTS is looking for high performing Compliance Specialists. Our team works collaboratively to assist our clients in navigating, troubleshooting and performing functions within the CalCERTS registry.  
This position requires continuous learning and motivation to succeed. For more information go to [www.calcerts.com/jobs\\_at\\_calcerts](http://www.calcerts.com/jobs_at_calcerts).

Business for Sale

Small Residential/Light Commercial Service and Installation company serving San Gabriel Valley and North Orange County. Excellent customer base, 5 Star Yelp, Quickbooks Pro with online pay and billings. Great addition to existing business or for home base business. \$500K in service and installations. \$185,000 call or text 626-484-7199.

Advertise in  
**INDOOR COMFORT NEWS**  
(818) 551-1555

Advertiser Index

**ADVERTISER..... ICN PAGE**  
Airex Manufacturing .....17  
Baker Distributing Company .....16  
Carrier Corporation .....19  
Dial Manufacturing .....21  
Ferguson HVAC .....2  
Ferguson HVAC .....3  
Fieldpiece Instruments .....14  
Goodman .....36  
IHACI Trade Show Exhibitors .....31  
Inaba Denko America .....25  
Mitsubishi Electric .....5  
North American Technician Excellence (NATE).....22  
Olimpia Splendid USA .....11  
Parker Hannifin .....12  
Pacific Gas & Electric (PG&E) .....8  
Pro Source / Pro Lift.....28  
Rapid Duct Testing .....23  
R.E. Michel Company .....6  
Russell Sigler, Inc.....15  
RUUD .....29  
S&P USA Ventilation Systems.....24  
San Diego Gas & Electric (SDG&E).....10  
Service Roundtable .....4  
Shuretape .....20  
Sierra Chevrolet .....27  
So Cal Gas.....7  
Test Products Intl, Inc. ....18  
The Chemours Company .....13  
USACD.....9  
Vent Cap Systems .....30

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

IHACI OFFICERS

**Mark Ramirez**, President  
Comfort Climate Control  
  
**Carlos Ruiz**, Vice President  
Southern California Gas Company  
  
**Dean Gilford**, Secretary/Treasurer  
Kilowatt Heating, A/C & Electric

BOARD OF DIRECTORS

**Steve Adams**  
Ferguson Heating & Cooling  
  
**Jim Batts**  
Los Angeles Department of Water and Power (Retired)  
  
**Steve Clinton**  
Southern California Edison  
  
**Eric Linares**  
Ingersoll Rand  
  
**Robert Scott**  
RASENT Solutions  
  
**Bob Wiseman**  
Canoga Park Heating & Air Conditioning  
  
**Penny Yonan Padgett**  
US Airconditioning Distributors

INDOOR COMFORT NEWS

**Gilbert Rivera**  
Editor  
  
**Karina Ball**  
Advertising Sales Professional  
  
**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**  
Accounting

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

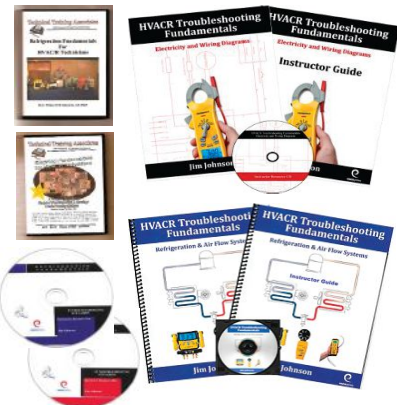


Want to develop an in-house training program to upskill your technicians?

Check out our  
**HVACR Troubleshooting Fundamentals Technician Training Package**  
For Trainers & Service Managers!

This training package includes:

- Two Trainer Textbook Resources That Include A Technician Textbook & An Instructor Guide & PowerPoint Presentation Containing The Answers To The Questions In The Workbook
- Two Video Training Programs That Include A Resource Disc Containing Quiz Questions & Resource Materials
- Two HVACR Troubleshooting Fundamentals PowerPoint Programs
- Two Copies Each of Two Technician Textbooks
- Additional Free Bonus Video Program That Includes A Resource Material Disc



A \$745 value for only \$633!

These resources can be implemented into your in-house staff development program, technicians-in-training use their textbook for study and accomplishing end-of-chapter exercises.

At your regularly scheduled training sessions, the Instructor Guide and/or Power Point gives you the opportunity to assess technician progress, and the DVDs allow you to present video segments to supplement the training process.



**Technical Training Associates**  
Skill Development Through Specialized Training



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

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





# Two great brands. One smart system.

Introducing the Google Nest Thermostat E + Goodman, the complete branded system that brings together the helpfulness of Google with the year-round comfort of **Goodman**.

## Why Google + Goodman?

### Stay connected to customers when they need you most.

With HVAC monitoring on the Nest Thermostat E, the homeowner receives emailed alerts that include their Goodman Nest Pro contact information so they can easily book an appointment.<sup>1</sup>

### The power of Goodman. The helpfulness of Google.

The Nest Thermostat E pairs effortlessly with new Goodman equipment, so it's easy to install. And it helps customers stay in the know with proactive alerts and monthly updates.<sup>1</sup>

### Offer a better customer experience.

The Nest Thermostat E + Goodman delivers energy-saving features, remote control, and beautiful design.<sup>2</sup> Plus, it comes with a special five-year limited warranty.\*

### Build your smart home business.

With an entire suite of products designed to work together, Google Nest helps you expand your smart home portfolio and grow your business all year round.



Visit [www.goodmanmfg.com/products/controls/goodman-nest](http://www.goodmanmfg.com/products/controls/goodman-nest) to learn more about the Nest Thermostat E + Goodman.

## Don't miss all the benefits of being a Nest Pro.

Get VIP support, earn amazing rewards, and build customer relationships with HVAC monitoring.<sup>3</sup>  
**Sign up today at [g.co/nestpro](http://g.co/nestpro).**

<sup>1</sup>Alerts can notify you of a potential issue with eligible HVAC systems. They're meant to provide helpful information, not an endorsement, representation, or warranty of any kind about the health of your HVAC system. Alerts aren't intended to replace a diagnosis by a qualified HVAC professional. <sup>2</sup>Some features, including mobile notifications, remote control, video streaming, and video recording, require working internet and Wi-Fi. <sup>3</sup>Nest Pro Rewards available to Nest Pros in the US only. See <http://bit.ly/pro-rewards-terms> for terms and conditions.

\* The full text of Goodman limited warranty on this product may be viewed at [www.goodmanmfg.com/products/controls](http://www.goodmanmfg.com/products/controls), or may be requested in paper by contacting us at 19001 Kermier Road, Waller, TX 77484.