

Air Conditioning ODAY



APRIL 2020 Serving the HVACR and Plumbing Industries Established in 1986 Vol. 34, No 4

AHRI Lauds State Recognition of "Essential" Status for HVACR and Water Heating Industry

Coronavirus Highlights Need for Fully Operational Health, Safety Equipment

Arlington, Air-Conditioning, Heating, Refrigeration Institute (AHRI), the trade association representing manufacturers of heating, water heating, air conditioning, commercial refrigeration products and equipment, expressed its appreciation to the 23 states and the District of Columbia* that thus far have heeded the industry's call for "essential business" status during this health "These governors deserve

the thanks of the manufacturers, distributors, contractors, engineers, and technicians that are committed to continuing to keep the American people productive, healthy, and comfortable in these trying times," said AHRI President & CEO Stephen Yurek. "Our industry is working overtime to ensure that lifesaving equipment remains available to all who need it," he added.

Last week, AHRI joined with nine other organizations,

representing the HVACR and water heating equipment manufacturers, contractors, technicians, engineers, plumbers. sheet contractors in issuing a statement to governmental organizations grappling with travel and personal interaction restrictions designed to prevent the spread of infection. Those trade associations and membership societies representing North America's heating, ventilation, air conditioning, refrigeration, and water heating industry had requested that federal, state, and local authorities grant "essential business" status to the HVACR and water heating industry.

Organizations signing the statement included AHRI; the Air Conditioning Contractors of America (ACCA); the Heating, Airconditioning, and Refrigeration Distributors International (HARDI); the Air Movement and Control Association (AMCA); North American Technician Excellence

(NATE); the Plumbing, Heating, Cooling Contractors National Association (PHCC), the Sheet Metal & Air Conditioning Contractors National Association (SMACNA); the Heating, Refrigeration, and Air-Conditioning Institute of Canada (HRAI); ASHRAE; and the Mechanical Contractors Association of America (MCAA).

*AK, CA, CT, DC, DE, GA, HI,
IL, IN, KY, LA, ME, NV, NJ, NC, OH,
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Johnson Supply Sales and Operations Meeting



Pictures on page B4.

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ASHRAE Offers Course on the Role of HVAC Systems on Infection Control

Atlanta – ASHRAE will offer a course on the role of HVAC systems in infection control in hospitals.

The course, "Designing and Operating High-Performing Healthcare HVAC Systems," is one of 11 offerings in ASHRAE's Spring online instructor-led course series, taking place on April 7.

"Infection control is a primary purpose of HVAC systems in hospitals," said course instructor, Dan Koenigshofer PE, MS Public Health, HFDP, SASHE. "Although COVID-19 is not considered an airborne contagion, the design and operation strategies described in this course may be helpful during the current pandemic. It appears

that COVID-19 can be transmitted through aerosols. The movement and concentration of aerosols can be influenced by the HVAC system. Thus, it's important for hospital engineers to understand the methods to remove and reduce airborne aerosols, using the HVAC system."

This three-hour course focuses on the design and operation of HVAC systems in healthcare facilities. The course details the relationship of infection control and HVAC design, including application of ASHRAE's HVAC Design Manual for Hospitals and Clinics, Second Edition, and ANSI/ASHRAE/ASHE St andard 170-2017 Ventilation of Health Care Facilities. Key elements covered

in the course include: infection control, comfort, reliability, safety, maintenance, energy, and flexibility.

Course topics are as follows:

- Discussion of costs of Hospital-Associated Infections (HAI) in the U.S.
- Controversial issues regarding
 HVAC and infection control such as air change rates and levels of filtration
- Engineering methods to maintain proper temp. and humidity
- How to pressurize to move air from clean to less clean areas
- The equation for the probability of getting an infection
- Reasons why the air velocity is limited – deposition and thermal plume

• The design of airborne infectious isolation rooms, protective isolation rooms, operating rooms, emergency depts, sterile processing department and infection control risk assessments

The course will highlight the design, operation, and methods of filtration, UV lighting, and monitoring of pressure, temperature and humidity in HVAC systems for healthcare facilities.

Participants can access this instructor-led course from anywhere with an Internet connection and earn continuing education units/professional development hours for each course completed.

To register, visit ashrae.org/

Insco Distributing RUUD Pro Partner Event in San Antonio



Pictures on page 23.

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New Home Buyers Undeterred In February, According To Meyers Research

The New Home PSI came in at 122.7 for February, representing a 16.4% increase from February 2019. On a month-over-month basis, new home sales increased by 3.6% between January and February 2020.

Costa Mesa, Calif. -- The experts at Meyers Research, the housing industry's foremost advisors, released the New Home Pending Sales Index (PSI) for February 2020. The New Home PSI, backed by data from Zonda and Metrostudy, shows pending sales increased year-over-year and monthover-month across the United States. The index is a leading residential real estate indicator based on the number of new home sales contracts signed across the country.

The New Home PSI came in at 122.7 for February, representing a 16.4% increase from February 2019. On a month-over-month basis, new home sales increased by 3.6% between January and February 2020.

"Consumers were home shopping at cycle-highs in February," said Ali Wolf, chief economist at Meyers

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Air Conditioning

Research. "Low mortgage rates and beating the spring

"The February data captures housing activity ahead of the increased uncertainty around COVID-19." said Wolf. "With containment measures increasing by the day, traffic in the new home market is expected to slow in the coming weeks. Even still, the recent trend for housing captures strong demand that will likely rebound quickly when the

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selling season rush were two main contributors to the burst

coronavirus recedes."

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Can Other People See Your Vision?

It is not enough to have a general idea of an end result. Unless you are going to do all the work, you must have a clear company vision defining your purpose and goals to others. Your employees, business associates, and family members have to see your vision if they are going to help you achieve your end result.

A great example of vision and passion is the story of Walt Disney as he began construction on what would eventually become Disneyland. Working with the construction crews he mapped out every detail of the park. He envisioned a magical place and it was important to him that everyone entering the park would feel that magic from their first step.

He insisted Cinderella's castle be built first. Located in the center of the park it was impractical and expensive to build the castle first, but Disney insisted. Why? To him the castle was not just the center of the park, it was the center of the idea. It represented the magic of the park. He was convinced that once it was built others would see the park the way he did. And he was right.

So how do you communicate your

vision if you don't have something as specific as a castle in the center of your business?

Clarify your company vision or yourself.

This is not a busy work activity, but a serious commitment to a future path. To find that vision answer a few simple questions.

- 1. What will your company look like in 5, 10 or 20 years? How many employees, what types of customer, and what services will you offer?
- 2. What do you want to be known for? When people talk about you and your business what's the first thing most people will say?

As you answer those questions, a picture of the company will emerge. The more specific you are, the clearer the picture becomes. Now you are ready to start sharing your company vision with others.

Sharing your vision

Live the vision. You need to commit to this vision of your future

completely. Everyone around you must feel the passion and energy you have for this outcome. If you aren't excited they won't be.

Tell a story. People don't see facts and figures. They won't visualize a spreadsheet. You need to bring others into your vision with the story of the business you hope to be, the people you will help, and the changes your company will make in the market place and the lives of the people you touch. The story is what will give life to a vision by capturing hearts and minds. It also makes it easier for your team to communicate the vision to others.

Practice your elevator speech. You won't always have time to tell your whole story, so think about the most relevant information. This becomes your elevator speech, a clear brief way to summarize your vision. It needs to be short enough to share in a typical elevator ride, a walk to the parking garage, or waiting in line at the coffee shop.

Share, share, and share again. Use written words, podcasts, and video to share your vision, but don't forget more tangible items like coffee mugs, t-shirts,

and pens to put your ideas in front of your team time and time again. Share your ideas regularly in group meetings and in one-on-one conversations with team members. Use every conversation as an opportunity to transmit information, receive feedback, build support, and create energy around the vision.

Identify other storytellers. As you build out your vision, you will need to reach more and more people and you can't be everywhere. Identify key players, people in your organization, stakeholders, or supporters who are great communicators who can tell your story as well, or better than you do. Political campaigns call these people surrogates. They are influential, respected, and knowledgeable. They may even have their own constituency they can motivate to buy into the vision.

Celebrate as your company vision becomes a reality.

Eighteen years ago I envisioned a company built on three values: *Creativity, collaboration, and positive energy.* While I couldn't envision all the twists and



Lorraine Ball

Marketing strategist, Lorraine Ball leads the crazy, creative and very talented team at Roundpeg. (www.roundpeg.biz), a digital agency specializing supporting the service industry.

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turns there would be along the way, the company is still pretty close to that original vision. Just walk into our castle, the little white house with the blue shutters, and you will find creative, positive people who work well together and with our clients. That was my vision, what's yours?

Need help defining and communicating your vision? Give us



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Danfoss Accepting Entries for its 11th Annual EnVisioneer of the Year Award Competition

Award recognizes OEMs, building owners, municipalities, contractors, and end users for advancement in energy efficiency, environmental responsibility

Danfoss, leading manufacturer of highefficiency electronic and mechanical components and controls for air-conditioning, heating, refrigeration, industrial, and water systems, is accepting entries for its eleventh annual EnVisioneer of the Year award competition.

2010, Launched in the competition recognizes American manufacturers equipment (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 an application by July 15,2020. Applications will be reviewed and selected by a panel of third-party judges representing various disciplines.

In 2019, Danfoss recognized Arctic Chiller Group as the winner of the EnVisioneer of the Year award program. Arctic Chiller Group is using Danfoss Turbocor® oil-free magnetic bearing centrifugal compressors in the development of its air- and

water-cooled chillers with new Arctic Boost option to dramatically reduce first costs of equipment as well as energy consumption. Specifically, in a Washington, DC, office building, the technology enabled the building owner to quickly benefit from energy savings and reduce system complexity and total lifecycle costs.

For more information about the EnVisioneer of the Year award competition, read about previous winners, or submit an entry, please visit https://www.danfoss.com/en-us/about-danfoss/insights-for-tomorrow/envisioneer-of-the-year/.

Rees Scholarship Program for HVACR Technicians Expands

AHRI Partners with SkillsUSA

Arlington, Va. -The Board of Directors of the Clifford H. "Ted" Rees. Jr.. Scholarship Foundation. 501(c)(3) charitable foundation of the Air-Conditioning, Heating, and Refrigeration Institute (AHRI), announced partnership with SkillsUSA, expanding the long-standing scholarship program designed students pursuing a career in the HVACR and water heating industry. With more 365,000 members nationwide, SkillsUSA is a partnership of students, teachers, and industry working together to ensure a skilled American workforce.

"The Rees Scholarship Program exists to ensure that

qualified, knowledgeable technicians are available to support the industry," said AHRI President and CEO Stephen Yurek. "Our SkillsUSA partners share the same interest in supporting a skilled technical workforce, and we are honored that we can now offer even more scholarships to deserving students, thanks to this new partnership."

"SkillsUSA is thrilled with AHRI partner and the Rees Scholarship Foundation to support building a pipeline of students who are continuing their education toward meaningful and lucrative the HVACR careers in industry," said SkillsUSA Executive Director Chelle Travis. "This scholarship will benefit students, their schools, and future employers, and reinforces the value of SkillsUSA membership in creating new opportunities for students."

The Clifford H. "Ted" Rees, Scholarship SkillsUSA Foundation Scholarship will include eight one-time, merit-based scholarships SkillsUSA students pursuing post-secondary career training in the HVACR beginning industry, spring. Details on donating to the Rees Scholarship available at www. ReesScholarship.org. The Foundation provides special recognition to donors at a variety of giving levels.



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Making a Departmentalized Income Statement

In my last column, I made a passing reference to a "departmentalized income statement" and promised I'd get back to that topic soon.

Promise made, Promise kept!

What Do I Mean by "Departmentalized"?

First, I assume you know what an income statement is. (Some call it a profit and loss statement, but that is impossible—it cannot be, at the same time, a profit AND a loss statement. It is one or the other!) If you don't know what in income statement is, I can only wonder how you have made it this far (unless this is your first week in the trade).

By "departmentalized", I mean in income statement that is broken up into your respective "profit centers" (what most contractors call "departments") so one can see quickly which departments are doing great (those favorite children you will feed and nurture) and which ones stink (those kids who you swear aren't yours and who you'd like to starve out of existence).

It is easy to do, but the trouble is, most off-the-shelf accounting packages don't do it the right way. And doing it the wrong way may make it possible for those ugly kids you swear aren't yours to inherit your wealth. But I digress.

Don't Panic—There's an App for That!

Well, not actually an App, but at least a spreadsheet. At the end of this column, I'll tell you how to get a free copy.

Start by listing all your departments. This list might

look like this for you:

- Installation
- Service

Or, if you are a little more complex, like this:

- Residential Installation
- Commercial Installation
- Service
- Plumbing
- Refrigeration

It can get complex—residential and commercial NEW construction, residential and commercial REPLACEMENT construction, residential and commercial service, plumbing, sheet metal, refrigeration, electrical, and

But here is my rule of thumb: don't list more than 7 departments. (If each department was an equal contributor, each would contribute about 14% of your revenues, and measuring below that level is often an exercise in frustration.)

Assign to Each Department What You Can

For each department, it is now vital that you attribute revenues and expenses. [1] You will need to list revenues for each of your departments, obviously. [2] But also it is a requirement that you track the cost of direct labor to each department. You must get this from your payroll records and be sure to include the cost of benefits as well as all unbillable time.

[3] Next, be sure to track the **cost of goods sold** (material costs) for each department. (This includes, of course, condensing units, heat pumps, furnaces, coil, air handlers, controls, boilers, and so on.) For the service

department(s), list the **cost** of parts that were sold.

[4] Next, you'll need the **total overhead** from your income statement. That's all you need to get a rough departmentalized picture.

Don't Get Lost in the Weeds

Some contractors go well beyond these general guidelines, but these are adequate to help you develop the proper factors for job pricing (using COWL). Some contractors, for example, track individual trucks to individual departments-but what happens if on Thursday a service van is used to deliver a new condensing unit and furnace to a job site? Likewise, some contractors break out advertising by department (and if you can do that with a simple click of



Richard Harshaw

a mouse button, it's a good idea). But don't drill down so deep that you spend more time digging out the data than the return that mining expedition costs you in terms of time and migraines.

A Sample Printout

Allow me to show you the printout of the Excel spreadsheet you can request from me. It is wide, so I'll will show it in two parts: The total income data and the gross breakdown into installation and service, and then the breakout for six departments.

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Title: The "Law of Unintended Consequences" - How A Service Part Can "Kill" The Compressor

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Topic(s):

- · When the motor-run capacitor fails, the capacitance of the Hard-Start Kit is still connected to the compressor.
- With the Hard-Start Kit still connected, this will allow the compressor to start and run without the motor-run capacitor.
- The compressor was <u>not</u> designed to run without the motor-run capacitor, and it <u>will</u> overheat and lead to compressor failure.

[NOTE * It's estimated that between 2 to 3 million motor-run capacitors fail each year in Air Conditioning and Refrigeration Systems]

Summary:

There are times when the attempt to do something positive can result in something unexpected or unforeseen. The annual increase in the number of Hard-Start Kits being added to air conditioners is a perfect example. Hard-Start Kits are being installed by contractors for a variety of reasons, such as extending the life of an old compressor, reducing starting amperage, and lowering the load on the utilities.

Utilizing a failed "open" motor-run capacitor as the basis for our "Destructive-Analysis" experiments (in conjunction with the Advanced Technology College of Daytona State College), led directly to the failure of a number of our "test" compressors. That is, once started, a compressor WILL run without a motor-run capacitor. Compressors were never meant to operate without a motor-run capacitor*. The problem will occur because the Hard-Start Kit will briefly replace the failed motor-run capacitor; thereby allowing the compressor to re-start. In our experiments, we've seen the compressor quickly overheat, with surface temperatures reaching as high as 101°C (Centigrade) or 213.8°F (Fahrenheit) and refrigerant pressures as high as 700psi. While the compressor's own internal protective devices attempt to protect the compressor, the REPEATED restarts are what destroys it.





Past and current designs have the wires from the Hard-Start Kit connected to the same motor-run capacitor terminals that are wired to the compressor. In these designs, the capacitor terminals are acting like "terminal blocks". With the large "boost" of capacitance from the Hard-Start Kit, compressor failure WILL occur after an extended time running without the motor-run capacitor, accompanied by the repeated "hammering" the motor takes from "high-boost" over-capacitance starts.

AmRad Engineering has the solution to this issue, the NEW Patent-Pending Motor-Run Capacitor with Compressor Protector Terminal (CPT™)! The new design for our Turbo series capacitors has a separate terminal specifically for use with any Hard-Start Kit. This terminal is connected internally to the common terminal and will COMPLETELY separate the Hard-Start Kit from the compressor upon a motor-run capacitor failure. This will save the compressor because the Hard-Start Kit is no longer in the circuit to allow the compressor to restart.

The New Terminal design works with ALL Hard-Start Kits, including popular 3-wire Hard-Start Kits. All Turbo200® series capacitors will be available with compressor protection technology and have the Compressor Protector Terminal (CPT™)! All AmRad motor-run capacitors will be available with this CPT™ terminal later.

Installation is simple. With the orange colored Compressor Protector Terminal (CPT $^{\text{TM}}$) clearly marked and ready to install with any Hard-Start Kit/BOOSTER System. Simply attach one wire from the Hard-Start Kit to the CPT $^{\text{TM}}$, the other wire to the "Herm".



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Turbo2 & X

The Universal Permanent Replacement Motor-Run Capacitors



What AmRad Has Discovered

When a motor-run capacitor fails in a hard-start system, the hard-start keeps kicking on the compressor without the capacitor regulating. This will cause overheating and a shorter compressor lifespan.



A Better Hard-Start System (With CPT™)

Connection to the compressor will be cut off if the capacitor fails

Turbo With CPT™ Can Be Used With Any 2-Wire or 3-Wire Hard-Start









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** Although the Turbo® series of capacitors have an extremely low failure rate (.0001%), the CPT™ terminal is being introduced initially on these parts. In the future, AmRad motor-run capacitors will incorporate the CPT™ terminal.





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FPA Section 608 Remote Proctored Exams



Coronavirus has led many organizations to limit the number of people coming into their facilities, making it difficult for technicians to take their closed-book EPA Section 608 Exam, required to purchase and work with regulated refrigerants.

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While you work through these difficult times, our staff will be phasing in additional remote-proctored exam solutions, and keep you apprised of them as they become available.

We wish you the best during these difficult times.

Cash Flow Management **During Challenging Times**

In this unprecedented time, we know you are likely already considering ways to reduce your fixed costs. It is best to approach your cost cutting with precision and intention. Here are some potential ways to approach your cash flow management:

- Rent. See if you can negotiate a lower monthly rent by either signing a long-term lease with your landlord or asking for a temporary price cut.
- · Marketing. Reduce your marketing spend by leveraging social media. It is critical to communicate openly with your customers about the status of your operations and the protective measures you've implemented. Social media, email and phone calls provide you a free way to communicate these messages.
- **Inventory management.** Try to negotiate a better deal from your current suppliers or find alternative sources who can provide the same service or product at a lower price. Also, if you believe your demand will decrease, try to optimize your supply to match it.
- Seller note. If you have a seller note, contact the seller to request a lower monthly payment.
- Refinance. With such low rates, consider refinancing your home mortgage and apply your

cost savings back to your household or business.

In addition to reviewing your fixed costs, if you have business interruption insurance, now is the time to contact your insurance agent to understand what your policy covers and doesn't.

Live Oak Bank is committed to supporting our customers and helping your businesses thrive in the face of an everchanging environment.

Brandon Bolen

Brandon Bolen is the President of Service Contractor lending at Live Oak Bank, where he focuses on providing longterm business financing to HVAC, plumbing, and electrical contractors throughout the United States. Prior to this role, Brandon was an analyst on the emerging markets team at Live Oak where he helped launch new industry concentrated lending divisions, including service contractors. Brandon joined Oak in 2014 as a business advisor where he managed a portfolio of loan customers in the investment advisory space. He then served as an underwriter and underwrote over \$250,000,000 in SBA loans.



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It's On My Heart: A Move That Was Amazing

So we just completed a move from Phoenix to Dallas, started a new position with Service Roundtable, a company I have worked with as a consultant for years. I am the Vertical Market Manager for HVAC, one of four Vertical Markets under the Service Nation umbrella. Sit back while I share the onboarding process and how amazing it was.

This process started before I ever hit Dallas, got a series of emails detailing insurance coverage, holiday pay, benefits and responsibilities of my new position. The company had a portal that I logged into, where all my secret stuff was stored. In fact, I had a question early on, the first page in the portal said if I had questions, email one of our amazing team members who will get back to you fast! I did, and they did. Got an answer in just a few minutes, surprised me how quick it was.

They had a Zoom

meeting scheduled for all team members a couple of days before I started, I was still in Phoenix packing up for the move. I was listening in (I believe the term is lurking) with video shut off. Someone asked if I was on the call, another person said I was but in listen mode only. So I opened up the video link, they all shouted out, Welcome Aboard. It felt really good. We hit town on a Sat, unpacked the UHaul, spent Sunday looking at our new town. I got an email Sunday evening, it said "Welcome to Your First Day". Another really feel-good thing. That email shared what would happen on Monday, my first day. Who would be involved in filing out paperwork, how the phones worked, all the details for starting a new job.

Here is what is interesting. The portal, the

emails, all were automated. No one had to sit down and crank out another message, set up a virtual meeting. Since I have had my own consulting business for the last 20 years, I had not been exposed to this sort of onboarding, maybe it happens every time today. But I doubt that. The new employee, no matter if they are 23 years old, or a multiple of that age, still feels a little nervous that first day.

When I came into my office, there were valentines all over the walls and offices. Turns out the company has a tradition of posting large heart shaped valentines for each employee. We just took them down two weeks later. One of the girls asked if I was going to keep mine. Told her had not thought of that, but I did put them on a shelf above my desk. She said she had hers saved for the past few years! Again, it is little things that make a huge difference.

Here is my application for your company. What is your onboarding process? Years ago I worked in the business as VP of sales for Donley Service Center. Jim Donley would sit down with each new hire and explain the culture of the company. Have a client that tells new techs and installers: I will never fire you for making a mistake, I will fire you for misleading or lying to a customer. I is a good thing to tell the new employees what the boundaries are, what is expected, as well as not accepted.

At the Service Roundtable, we have a couple of computer screens that have a rotating message in the break rooms and hallways. The messages are compliments for employees from coworkers when they have done something amazing, above and beyond the normal duties.

SEE HINSHAW PG.B11



Jim Hinshaw

Upon graduating from the University of Missouri at Rolla, Hinshaw started his career in the air conditioning industry. Hinshaw's background includes positions as a manufacturer's rep, President of one of the oldest and largest air conditioning companies in Arizona, residential startup specialist for the Carrier Corporation, and an officer in a Carrier owned service agency.

Hinshaw enjoys training sales, technical, and management team members with companies that want to increase profits and grow to the next level. He has worked in all areas of the industry: manufacturer, distributor, contractor and now consultant. He has worked with companies that have sales in the billions per year and family owned businesses with only two employees. He can help with sales, organizational issues, marketing, how to set

up the company for improved profitability, all phases of the business.

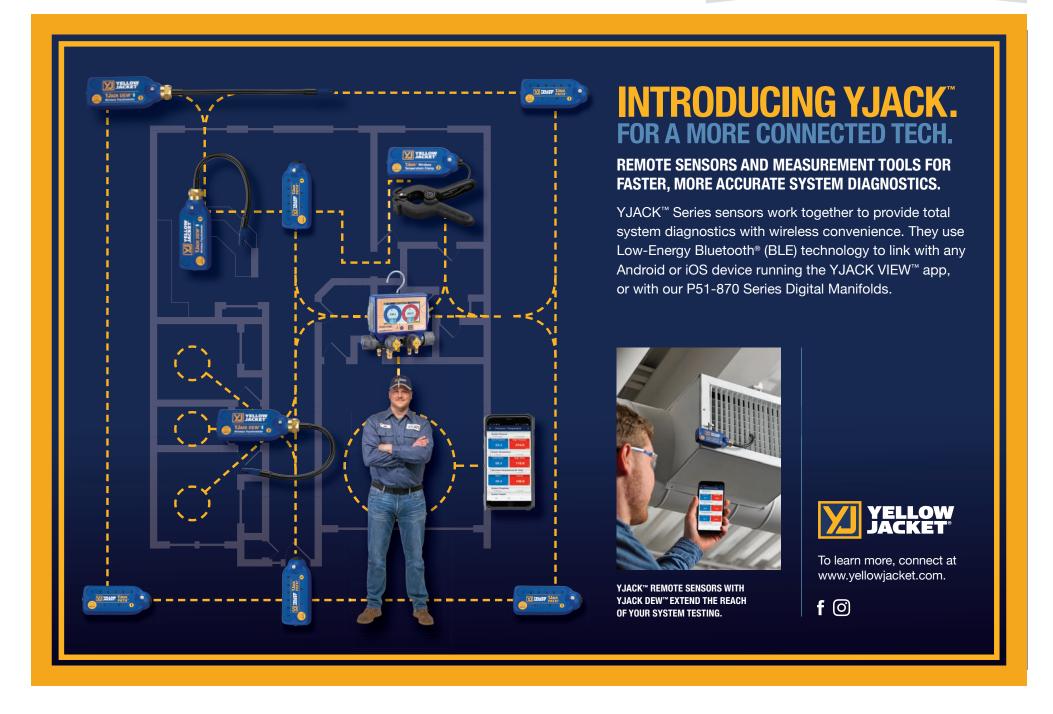
He has provided highresults training for clients from Calgary, Canada to Adelaide, Australia. Hinshaw retired from the contracting business in 1999 when he formed his own training company, Sales Improvement Professionals, dedicated to bringing his real-world experience to help enhance your sales and marketing efforts.

Hinshaw can be reached at 602-369-8097, or via email at jimhinshaw@siptraining.com.

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Formore information please contact him at Sales Improvement Professionals, Inc., 18245 N. 66th Way, Phx, AZ, 85054; Office Phone: 970-635-5675; Cell Phone: 602-369-8097, or visit www.siptraining.com; or on Facebook: Sales Improvement Professionals, Inc





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SpeedClean Highlights Women in the HVACR Industry

Stamford, Conn. – As we celebrated Women's History Month in March, SpeedClean highlighted conversations with women in the HVACR industry on its blog. A leader in innovative maintenance solutions, SpeedClean spoke with the women about how they got started in the business, challenges they face being a woman in HVACR, and advice they have for other women interested in getting into the field.

According to the U.S. Department of Labor, women make up less than 2 percent of the heating, air conditioning and refrigeration mechanics and installers workforce. Looking at the workforce across all industries, a 2015 report from the U.S. Department of Labor states that 46.8 percent of U.S. workers are women.

"In an industry that is already facing a labor shortage, it's important that we are taking the steps to encourage women in

the skilled trades," said Danielle Vinci, marketing manager at SpeedClean. "There is a great mount of support among women in the HVAC community and Women's History Month is a time to acknowledge these women and show that it doesn't have to be a male-dominated industry."

The blogs were posted on SpeedClean's website at https://www.speedclean.com/news/. You can also find more information on SpeedClean's products, including coil cleaning, mini-split and dry steam cleaning solutions.

SpeedClean and HVAC School are proud supporters of women in the trades, and we'd like to not only view March as a month for highlighting women in the field, but are taking steps and measures to ensure that women everywhere who choose a career in the HVACR Industry will find they have support and encouragement from our teams.



➡TDLR TEXAS DEPARTMENT OF LICENSING & REGULATION

TDLR Waiving Requirements for Some Licensees

Austin – To help keep its licensees ready and available to assist with combatting the spread of the COVID-19 virus, the Texas Department of Licensing and Regulation (TDLR) is taking the following actions:

- Waiving continuing education requirements for all licenses expiring in March, April, and May 2020. Licensees will still submit their renewal applications, pay the required fees, and have their criminal histories checked but they will not need complete any required continuing education requirements this licensing cycle.
- Allowing Speech-Language Pathologist and Audiologist interns to receive credit for supervised hours when they have "tele-supervision" and waiving time limits on the number of supervised hours the interns can complete. Allowing remote supervision will enable students to continue earning credits and allow their patients to continue receiving important therapies.
- Extending by 60 days all building inspection deadlines in the Elimination of Architectural Barriers Program for any inspections due in March, April, and May to help business owners and licensees who may be struggling to have buildings inspected during this time and allow buildings to be used in case they are needed immediately as part of the COVID-19 response.
- Extending inspection times for Boilers and Elevators with permits that expire in March, April and May. Hospitals and other medical facilities will see increased demand in the coming weeks. Temporarily extending required inspections for boilers and elevators will allow healthcare operations to continue. TDLR investigators will respond in case of an accident or emergency.

TDLR licensees can sign up for official TDLR email alerts here: https://public.govdelivery.com/accounts/TXDLR/subscriber/new. These email updates are the best way to ensure they receive the most accurate and up-to-date information about TDLR.

Century AC Supply Celebrates their Employees







Bernard Lindsay and Larry Hayden

Dennis Brock, is celebrating his 25th anniversary and Bernard Lindsay and Larry Hayden are celebrating their 30th anniversary with Century. What has kept them at Century so long? The answer they all gave us is the "the people I work with". Our employees have the "gung ho" spirit to the core and treat each other like family. Our culture encourages building strong bonds and being able to work alongside gifted and talented co-workers and having a great leadership team where everyone feels valued and appreciated. We're proud that our employees choose us to be their life-long employer!

The asthma & allergy friendly Certification Program Collaborates With Trane for Innovative Solutions to Improve Indoor Air Quality

While celebrating St. Patrick's Day in Washington, D.C., the Ambassador of Ireland to the United States, Daniel Mulhall, highlighted a significant three-way relationship between Allergy Standards Ltd. (ASL), the Asthma and Allergy Foundation of America (AAFA) and Trane.

Washington - Allergy
Standards Ltd. is an Enterprise
Ireland client company and cofounded the asthma & allergy
friendly® Certification Program
with AAFA, the world's largest
and oldest patient advocacy
organization dedicated to saving
and improving lives of people
affected by asthma and allergies.

The asthma & allergy friendly® Certification Program announced today that Trane©, a climate innovator advancing the quality of life by creating comfortable, sustainable and

efficient environments, has committed to collaborating with the Program on research & development and innovations for education on products which improve indoor air quality. This announcement was celebrated in Washington, D.C. with the Ambassador and Enterprise Ireland, the Irish Government agency which supports Irish businesses internationally.

The Global Ireland Lunch is attended by more than 300 Irish business leaders and government representatives aimed at fostering relationships and trade between the U.S. and Ireland.

Allergy Standards, based in Dublin, is led by a team of healthcare entrepreneurs and combats misleading product labelling claims through the asthma & allergy friendly® Certification Program. Through the Program, Allergy Standards adds value to products scientifically proven to reduce allergen exposure. They also provide meaningful compliance and risk reports for businesses and data insights in an 'allergy-aware' world.

More than 65 million
Americans are impacted by
asthma and allergies, and
symptoms are often exacerbated
by avoidable triggers in household
products. To address this issue,
Allergy Standards Ltd. develops
Certification Standards in
partnership with the Asthma and
Allergy Foundation of America
(AAFA).

"We are delighted that Trane's innovation agenda will now also contribute to the Allergy Standards' vision of a world where asthma and allergic exacerbations, caused by avoidable indoor triggers are eradicated," said Dr. John McKeon, CEO of Allergy Standards.

Trane has received asthma & allergy friendly® certification for its CleanEffectsTM Whole Home Air Cleaner.

Kenneth Mendez, president and CEO of AAFA, attending the business lunch today said, "This global partnership between an Irish health technology company, an American patient advocacy organization and socially-conscious manufacturers

is a world-class example for finding solutions to address today's challenges with asthma and allergies."

"Trane is honored to attend this event in Washington D.C. alongside Ambassador Mulhall, AAFA and Allergy Standards," said Katherine Shin, Digital Business Leader for Trane Residential HVAC and Supply. "We look forward to expanding our work with the Certification Program and further building out our work to create healthier homes."

Baird, Hampton & Brown Leverage LG's Variable Refrigerant Flow (VRF) System to Open Higher Ceilings and a Rooftop Bar at New Fort Worth Marriott Hotel

The newly remodeled art-deco Sinclair building, now a Marriott Autograph Collection hotel, in downtown Fort Worth boasts a new variable refrigerant flow (VRF) HVAC system by LG which literaly raised the first-floor ceilings and cleared the roof for a new bar. Baird, Hampton & Brown (BHB) provided civil, electrical, and mechanical/ plumbing engineering design services to make the building one of the most technologically advanced hotels in the world. The renovation of the 90-yearoffice-building completed in January 2020.

Every aspect of the building has been thoughtfully planned and coordinated so that the hotel is now considered "intelligent building," replacing including the building's traditional chilled and heating system with a VRF system. VRF is a type of air-conditioning system that adjusts refrigerant flow to different areas of a building as needed, instead of distributing large quantities of refrigerant at all times. This technique creates practical zoning, giving occupants the ability to adjust their space temperature to their preferred comfort level. An added advantage is that VRF is one of the most sustainable systems on the market.

When the first HVAC

system was added to the 105,000 sq. ft. building, the ceilings were lowered and windows were covered up in order to add ductwork, making the interior darker. The new VRF system requires much less space, leaving room to restore the original ceiling heights, and allowing guests to see the ornate windows on the ground floor. In addition, the VRF outdoor units were placed in the alleyway, on the mezzanine level, instead of the roof, which made room for a rooftop bar.

"We wanted to bring the ambiance of an early 20th century building back to what it was before, and the VRF system helps us do that," stated Gibran Michel, Associate and Senior Mechanical Designer at BHB.

Sinclair has multiple systems in place, including VRF, that will be controlled from one platform – allowing the technology throughout the building to be easily monitored. The disparate systems all work together in order to create a unique and individualized experience for each guest.

"LG's VRF system can communicate with the other controls in the building that make it intelligent. So, in essence, a hotel room's AC unit will respond to the person who walks in the room



and automatically know what setpoint temperature they are looking for," said Michel.

The Sinclair, once a 16-story-office-building, now boasts 164, upscale rooms with power delivered by network cables (Power over Ethernet or POE), that will enable lighting, video analytics, and more. In addition to knowing the preferred tempuratures for the occupants, the hotel is able to process checkout at the bathroom vanity as well as changing the LED shower lighting to match your favorate football team or mood.

The BHB team worked hard to blend aspects of two distinct centuries to ensure that guests would believe that their experience at the Sinclair will be in a category of its own.

"We expect The Sinclair to set precedents for not just boutique hotels, but the future of 'intelligent buildings,'" said Michel. "Once a tired office-buliding, that had lost it's edge, the Sinclair is now restored to its original decadence with a modern twist that Fort Worth residents and visitors will enjoy."

BHB's design of the hotel's VRF system was the firm's largest to date.

More Applications of VRF

BHB provided innovative design solutions to public and private sector clients throughout Texas since 1992. Its multi-discipline environment consists registered professionals skilled in land surveying, civil engineering and site development, MEP engineering, structural engineering, and design and construction administration, which is why University United Methodist Church brought them on board to replace its ageing heating and cooling system.

Located just a few blocks from Texas Christian University (TCU), University United Methodist Church was founded over 100 years ago, the congregation's main sanctuary was built in 1949 – and is still being used for worship today.

With 70-year-old builiding, deterioration and aging of the HVAC system comes with the territory. The sanctuary originally had a chilled water system with an air-cooled chiller and a hot water boiler - both of which were starting to fail. The Church asked BHB to find the option that would best benefit the building while also reducing operating costs. Unlike most older buildings built in the early 20th century, University UMC's existing HVAC system had ductwork, which meant that it could be reused when installing the new system.

"We needed to provide both heating and cooling, and if we used a conventional split system we would have to provide a lot of electric heat, but the church didn't have enough electrical capacity," stated Les Brown, Senior Associate and Senior Mechanical Engineer at BHB. "We decided to go with VRF because it has higher efficiency and uses a heat pump to provide heat during

low, outdoor temperatures."

The BHB team also recently completed a project to connect the early childhood center, lower, middle, and upper schools of All Saints' Episcapal School with a 29,600 sq. ft. student union. The Sellers & Campbell Union is not only unique because of its sleek, curved architecture, but it also uses a VRF system to heat and cool the building, while preserving energy.

The building's VRF system consists of 29 indoor fan/coil units above ceilings, and nine outdoor heat pump units located on the roof. VRF indoor units have ducted and ductless options, and while the student union uses both depending on the area of the building, they all work together seamlessly. Each indoor unit can individually send a signal to the outdoor unit, which then delivers the right amount of refrigerant needed. This allows heating or cooling capacity to be supplied to each unit without large variances in room temperature. Like the rest of the campus, the student union is now connected to the school's BCS (Building Control System), provided by Enviromatic Systems. This allows the owner to monitor and adjust all HVAC systems in every building from one computer.

Insco Distributing RUUD Pro Partner **Event in San Antonio**

Insco Distributing held their RUUD Pro Partner Event at the Andretti Racing School in San Antonio TX on March 10th. The contractors heard presentations from RUUD as well as other partners of Insco. They were treated to lunch, game tokens and go kart racing on the indoor raceway.

















AHRI Files Petition for Court Review of Commercial Boiler Rule

Arlington, Va. - The Air-Conditioning, Heating, and Refrigeration Institute (AHRI) filed a petition with the U.S. Court of Appeals for the Fourth Circuit challenging the validity of a Department of Energy (DOE) regulation on Commercial Packaged Boilers. "AHRI is asking that the Court review the rule because of our belief that the Department overstepped its statutory authority by issuing a rule that will impose an undue and significant burden on boiler manufacturers and consumers," said AHRI President & CEO Stephen Yurek. Of primary concern to AHRI is that because it ignored legally required procedures, DOE adopted a rule that does not save a significant amount of energy and is not cost-effective.

"The Department ignored a statutory requirement that it establish clear and convincing evidence that the rule results in significant energy savings that outweigh the costs imposed. Congress mandated specific protections for rules on commercial equipment, but in this case, DOE wrongly decided that those rules don't apply," said AHRI General Counsel Caroline Davidson-Hood. "We are therefore filing suit to hold the Department accountable and ensure that future rulemakings adhere to statutory requirements," she added.



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- ✓ Used in homes, schools, offices and hospitals



- ✓ Makes up to 10 gallons of disinfectant
- ✓ Controls mold, mildew and bacteria formation
- ✓ EPA Registered

Air Scrubber with ActivePure®

Technology Benefits

- ✓ Reduces exposure to common bacteria and viruses
- ✓ Reduction in respiratory issues
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Coronavirus: Fresh-Aire UV Efficiency Against Viruses, Bacteria & Mold

Fresh-Aire UV has been receiving inquiries regarding the effectiveness of UV disinfection systems against COVID-19 (coronavirus). We believe the best approach is to be as transparent as possible and to explain the fundamentals and variables that play a factor in inactivating coronavirus and other pathogens with UVC germicidal technologies.

Fresh-Aire UV systems are tested and validated against bacteria, viruses, mold & fungus. Fresh-Aire UV systems have been tested and achieve up to a *99.99996% reduction on microorganisms. There are a number of factors that need to be addressed in order to determine efficiency, these include but not limited to, the application, such as surface or air disinfection, air velocity and temperature, recirculation rates, and dwell time, as well as the specific biological target. Fresh-Aire UV systems are installed in the HVAC unit and/or ductwork and are designed to disinfect the air as it circulates through the ventilation system. UV dosage for log reduction is measured in several ways including microwatts per second/centimetres2 (µWs/cm2).

Every microorganism, including coronavirus, requires a specific UVC dosage for inactivation. UV disinfection has been employed for decades in water treatment; these microwatt values have been used for reference to gauge UVC efficiency against a large cross-section of microorganisms. While Fresh-Aire UV systems have not been specifically tested against coronavirus, they have been tested and proven effective against similar pathogens, some that require an even greater dosage for inactivation than coronavirus.

UV disinfection systems for HVAC are an ideal proactive measure to complement filtration. Microorganisms, particularly viruses, are so small that filters are mostly ineffective. The UV systems have also been shown to reduce problematic molds and pathogens that are found within the HVAC system and drain pan that would otherwise be introduced and distributed throughout the envelope of the building.

For additional information visit:

www.ashrae.org/technical-resources/

www.cdc.gov/coronavirus/2019-ncov/ index.html

Product News

Mitsubishi Electric Trane HVAC US Introduces the 2-Ton PUZ Hyper-Heating INVERTER® (H2i®) Outdoor Unit

Suwanee, Ga. – March 13, 2020 – Mitsubishi Electric Trane HVAC US LLC (METUS), the exclusive provider of Zoned Comfort Solutions® and a leading supplier of Variable Refrigerant Flow (VRF) heating and cooling systems, introduces the new P-Series Hyper-Heating INVERTER® (H2i®) PUZ outdoor unit, Mitsubishi Electric's first singlezone 2-ton H2i unit.

The PUZ hyper-heating outdoor unit is part of the P-Series product line from METUS, which includes indoor and outdoor units as well as controls for residential and light commercial applications. The PUZ H2i outdoor unit can be paired with a range of existing indoor units of varying sizes and designs, including:

- PLA ceiling-recessed ductless units in 12 - 42 KBTU/H
- PKA wall-mounted ductless units in 12 - 36 KBTU/H
- PCA ceiling-suspended units in 24 42 KBTU/H

- PVA multi-position air handler in 24 42 KBTU/H
- PEAD horizontal-ducted units in 12 42 KBTU/H

"We're very pleased to offer a 2-ton H2i unit that fills a vast single-zone application need," said Mitul Patel, director, residential product management, Mitsubishi Electric Trane HVAC US. "The PUZ hyper-heating unit gives customers more options for one-toone configurations and H2i technology in our P-Series lineup."

In addition to expanding system options, the PUZ H2i outdoor unit is rated for 100% heating capacity at 5° F and guaranteed heating capacity down to -13° F. Efficiency ratings for the unit include up to 21.5 SEER, 12 HSPF and

For more information about the PUZ H2i outdoor unit, and other heating and cooling solutions from Mitsubishi Electric Trane HVAC US, visit www.mitsubishicomfort.com.



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- → Static Pressure Controller
- → 40 VA Transformer
- → Fresh Air Control on board THERMOSTATS NOT INCLUDED





3 Zone Kit with Bypass Damper **ALL ELECTRONICS ARE MOUNTED AND** WIRED ON TOP OF THE ComfortPLENUM as Shown.

- → 21"x21"x50" 4 Damper ComfortPLENUM with Power Open/Power Close Motors
- → XCI Zoning 4 Zone Controller
- → Static Pressure Controller
- → 40 VA Transformer
- Fresh Air Control on board THERMOSTATS NOT INCLUDED

4 Zone Kit with Bypass Damper **ALL ELECTRONICS ARE MOUNTED AND WIRED ON TOP OF THE** ComfortPLENUM as Shown.

- → 21"x21"x53" 5 Damper ComfortPLENUM with Power Open/Power Close Motors
- → XCI Zoning 4-zone Controller
- → Static Pressure Controller
- → 40 VA Transformer
- → Fresh Air Control on board



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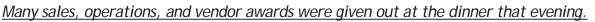
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Johnson Supply Sales and Operations Meeting

Johnson Supply held their Sales and Operations Meeting at The Woodlands Resort on February 20-21.

















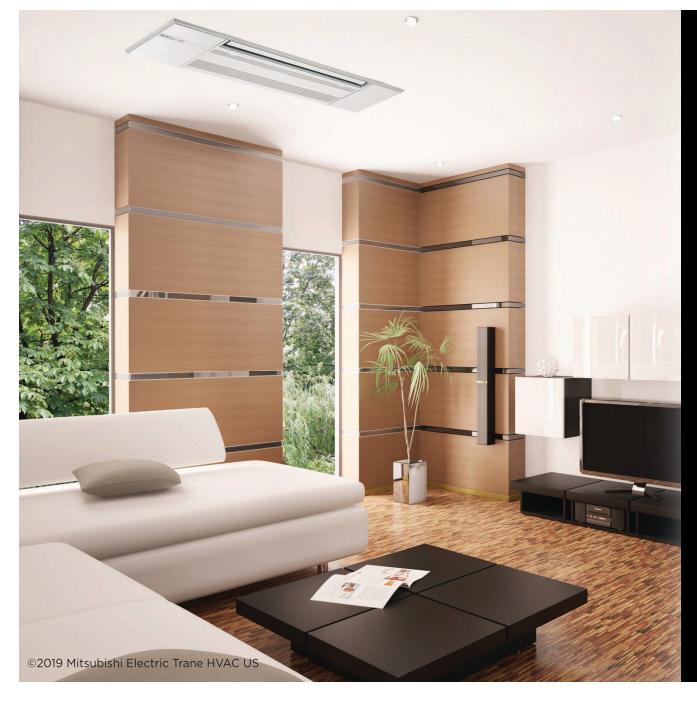












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EPA Refrigerant Rule Change

The United States Environmental Protection Agency (EPA) has issued a rule change to the <u>Section 608 Refrigerant Management Program</u>. As such, the <u>ESCO Institute</u> wanted to keep the HVACR community apprised of this ruling.

This ruling keeps intact the leak repair requirements for appliances containing 50 pounds or more of ozone depleting refrigerants, which include CFCs, HCFCs and any blends containing ozone depleting substances.

These requirements include:

- Calculating annual leak rates
- Repairing systems that exceed a predetermined annual leak rate
- Performing leak inspections after repairs
- Retrofitting, retiring, or mothballing systems that are not repaired
- Reporting chronically leaking systems and corrective actions taken to the EPA
- Record keeping requirements for these systems

The leak repair requirements (listed above), for systems charged with 50 pounds or more of non-ozone depleting refrigerants (HFCs and HFOs) have been rescinded. This ruling goes into effective 30 days after publication in the Federal Register.

The EPA is not changing the other refrigerant management provisions that were extended to non-ozone depleting refrigerants, (such as HFCs and HFOs) including:

- Anyone purchasing refrigerant for use in appliances regulated by Section 608, or handling refrigerants (such as air-conditioning and refrigeration service technicians), must be Section 608-certified.
- Anyone removing refrigerant from an appliance, containing regulated refrigerants, must evacuate refrigerant to a set level using certified refrigerant recovery equipment before servicing or disposing of the appliance.
- The final disposer (such as scrap recyclers or landfills) of small appliances, like refrigerators and window air conditioners, must ensure and document that refrigerant is recovered.
- All used refrigerant must be reclaimed to industry purity standards before it can be sold to another appliance owner.
 - Recovery and/or recycling equipment must be certified by an EPA-approved 3rd party.
 - An appliance must have a servicing aperture or process stub to facilitate refrigerant recovery.
 - Refrigerant reclaimers must be certified to reclaim and sell used refrigerant.

The rest of the refrigerant management requirements listed in Subpart F continues to apply to non-ozone depleting refrigerants (HFCs and HFOs), as well as ozone-depleting refrigerants (CFCs and HCFCs).

For additional information, registered proctors are encouraged to call ESCO Institute at 800 726-9696.

Style Crest®, Inc. Welcomes New Distributor Partner, Shearer Supply, Inc.

Style Crest, Inc. has partnered with Shearer Supply, Inc. to offer HVAC products for Manufactured Homes in new markets. This partnership with Shearer Supply, Inc. complements our existing Southern and Southwest operations

Fremont, Ohio- Style Crest, Inc. has partnered with Shearer Supply, Inc. to offer HVAC products for Manufactured Homes in new markets. The new partnership with Shearer Supply, Inc. complements the existing Style Crest Southern and Southwest operations and opens new manufactured home HVAC product offerings to Shearer Supply, Inc

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Due to COVID-19 shelter at home orders across the state, all April classroom continuing education has been cancelled. Starting in May, we anticipate our new course on Manual J Outcomes & Humidity Mgmt will be available at a location near you—or—online for your convenience.

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Laws and Rules for 2020



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Product News

Myth: The Bigger the HVAC System, the Better

The Truth:

Bigger does not always mean better, especially with HVAC systems. When it comes to specifying a mechanical system for a home, a system that's too large (in both capacity and footprint) can lead to a lot of headaches, discomfort and undue burden on your wallet, as well as a shortened lifespan for your system!

You may be thinking, "How can this be? Wouldn't a larger HVAC system just heat and cool my house better and faster? What's so bad about that?" Trust us, you aren't alone in that thought, but the phrase "bigger and better" doesn't apply here.

On-Off Cycling

First, let's cover the basics of "oversized capacity." Capacity is the amount of heating and cooling a system provides. The "load" is the amount of heating and cooling a space needs to be comfortable. To condition your home, your HVAC system turns on full-blast then runs until it reaches your set point, or preferred temperature. An oversized system might warm up your home in minutes but it'll shut off as soon as your desired temperature is reached. Then, once the temperatures start to drop because the system is no longer running, it starts up again. This cycle is called short cycling, and it can really put wear and tear on your system. Starting and stopping is energy-intensive, so short cycling is also wasteful when it comes to energy consumption and utility bills. Additionally, the constant on/off cycling can cause uncomfortable drafts.

Mitsubishi Electric Zoned Comfort Solutions® systems use INVERTER-driven compressors to heat and cool efficiently.

Instead of cycling on and off frequently, the compressors run constantly and ramp up or down based on the needs of each room. For even greater efficiency, the zone-by-zone control means units can be shut off in certain rooms or areas of the home that are used infrequently. This increased efficiency means cost savings for you.

Whether conventional or variable-capacity, a system with too large of a capacity will heat or cool more powerfully than is necessary and cause short cycling. A variable-capacity system still has a range. You're going to have performance issues if your heat pump's lowest capacity is still too much for a space's load. To get the best from Zoned Comfort Solutions, work with a Diamond Contractor® who'll make sure you get a correctly-sized system.

Big Performance from Small Footprints

While your HVAC contractor makes the calls when it comes to capacity sizing, the "bigger is better" misconception among homeowners also comes into play with the physical size of the equipment. Big, powerful outdoor units are sure to be better for conditioning a home, right? Wrong.

Mitsubishi Electric Zoned Comfort Solutions use streamlined, sleek, small-footprint designs to heat and cool homes efficiently. In fact, the narrow outdoor units fit closely to exterior walls and free up space for landscaping. Indoors, the EZ FITTM Recessed Ceiling Cassette fits discreetly into ceiling joists while giving homeowners the reliable, powerful performance they expect from bigger units

To learn more about energy-efficient heat pump options, visit mitsubishicomfort.com.

YORK® Affinity™ YXV Variable Capacity Air Conditioner





YORK® Affinity™ YXV high-efficiency communicating air conditioners feature an advanced design, which dynamically adjusts capacity to precisely match changing comfort needs for maximum comfort and minimized power consumption. These ENERGY STAR® Most Efficient qualified models offer up to 21 SEER efficiency and can cut energy costs by as much as 50% compared to older units.

Several additional features enhance the system's performance:

- The YORK® Affinity™ YXV can be offered as part of the new YORK® Hx™ 3 Communicating Zoning System, which creates a smart, high-efficiency home comfort solution. The system can support up to eight zones with each zone allowing up to five dampers to create a customized solution that fits homeowners' needs and budget.
- Built-in Charge Assurance[™] monitoring provides a direct readout of system condition, including high and low system pressures, and suction and liquid line temperatures while simultaneously displaying system superheat and sub-cooling values. This allows for faster, more accurate installations
- ullet An innovative QuietDrive TM sound reduction system silences vibrations with swept wing fan and composite base.



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Ken Barton stepping into new role as VP of Technical Sales at **Arzel Zoning**



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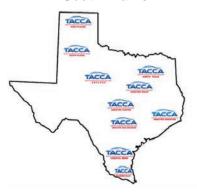


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TACCA Welcomes the following new members.
Thank you for your support!

All Temp Heating & Air Conditioning – Huntsville

Apple Leasing – Austin

Critter Ridder – Austin

Texas Total Comfort Systems - Azle

Johnson Supply – Austin

Chilly Air Services – Round Rock

The Texas Air Conditioning Contractors Association (TACCA) is a contractor-focused organization committed to assisting its members be licensed, quality contractors recognized for professionalism, excellence and superior customer service in their communities. With more than 50 years' experience helping contractors benefit from programs that include technical training, state-approved continuing education and advocacy at state and local levels, TACCA continues to set the standard for the HVAC/R trade in Texas.

A Letter from TACCA President James Barry with Doctor Cool & Professor Heat

Dear friends and colleagues,

What an unbelievable month the last month has been. Schools across the state extended Spring Break and then closed for weeks or the remainder of the semester, Major League Baseball pushed back Opening Day, March Madness was cancelled, NASCAR suspended all racing, public gatherings were banned, we were asked to follow "social distancing" (a new term for most of us), and finally, most of our cities and counties gave shelter-in-place orders. We have all been overwhelmed with the constant news updates concerning the Coronavirus and not completely sure what we are dealing with. We are worried about our families, employees, friends, businesses, finances, and our future. These are uncertain times indeed and all we can do is trust in the people with the knowledge and ability to guide us through.

TACCA is keenly aware that many of our members are small business owners with few employees and little time to keep up with the rapidly evolving changes. We dedicated ourselves to monitoring the ongoing situation and keeping our members informed on new developments that could impact their business. Almost daily updates were prepared to educate members on the latest developments. We have had positive response from our communications, and I am confident that once we are through to the other side of this crisis, we will be in a good position to continue to serve our members well.

The Air Conditioning Contractors of America (ACCA) asked for help to get HVACR contractors designated as Essential Service Providers. TACCA sent letters to policymakers and encouraged contractors in Texas to do the same. In Texas, Governor Greg Abbott so far has left decisions on shelter in place orders up to individual cities and counties. Shannon Noble, TACCA's Government Affairs Counsel, contacted the Governor's office to request that if a statewide shelter in place order is issued, HVAC/R be specifically named as an essential business. She also contacted the Department of Homeland Security Dallas office, which verified that HVAC/R is considered "essential" as part of the construction workforce, along with the plumbing and electrical industries. It is that Department of Homeland Security language which all Texas local shelter in place orders have quoted and are following. TACCA is confident that HVAC/R is considered an essential business in Texas.

Due to gathering limitations, followed by the shelter in place orders, TACCA cancelled all classroom CE through the end of April. Fortunately for contractors, the Texas Department of Licensing and Regulation waived continuing education requirements for all licenses expiring in March, April and May. Our classes are expected to start back up in May with our new course, "Manual J Outcomes & Humidity Mgmt". We are excited to present this course that was developed around top topics requested in a poll to members and class participants.

In closing, I've read several articles that basically say, when this is over, we will either wonder if we over-reacted, or we will know with certainty we under-reacted. We all need to do what is right and be safe with our families, company team members and clients, and I believe TACCA has helped with this. If you like what you've seen and heard from TACCA, I encourage you to join today, and if there is anything TACCA can do to help you, please let us know.

All the best!

James Barry
2020 TACCA President

TACCA Training Opportunities for 2020

Looking for an HVAC CE or license exam prep course? TACCA has been the leader in education for the HVAC industry in Texas for more than 50 years. We offer eight (8) hours of state-approved continuing education for contractors. Our instructors are knowledgeable and receive high ratings from our course attendees.

Due to COVID-19 restrictions, all CE classes for April have been cancelled, but we plan to start back up in May. See page B5 for upcoming continuing education opportunities and page B9 for exam prep course dates.



Save the Date – Texas HVACR Conference set for October 29-30

TACCA is excited to announce our first conference since 2016!

Topics include: Customer Service, Social Media and Digital

Marketing, Lessons Learned in a Crisis, Profitability and

Performance, Accessing New Workforce Talent, and much more.

Please save the date and plan to join us October 29-30, 2020 at the beautiful Lakeway Resort in Austin.

Mission: To promote quality and professionalism, help our members become more profitable, and enhance the HVAC/R industry's image with the consumer

Visit us at www.tacca.org or call 800/998-HVAC (4822) to learn more about TACCA membership, register for a class or sign up to receive news and information.

Construction Jobs Increase in 32 States in January from 1 and 12 Months Ago but Data Do Not Reflect Likely Impact of Coronavirus on Industry

<u>Texas and Utah Have Biggest Number and Percent of Annual Job Gains, While Louisiana and West Virginia Lag;</u>
New York and New Hampshire Have Largest Monthly Gains, Washington Has Biggest Decreases

Construction employment increased in 32 states in January compared to both December and January 2019, according to an analysis by the Associated General Contractors of America of Labor Department data released today. Association officials said that the data was collected well before the coronavirus began to impact the economy and that construction employment levels are likely to decline beginning in March as the virus impacts many parts of the economy.

"The construction industry began 2020 with widespread employment gains, although fewer states had increases than in 2019," said Ken Simonson, the association's chief economist. "Exceptionally mild winter weather in many states probably added to January construction employment totals."

Texas added the most construction jobs between January 2019 and January 2020 (34,900 jobs, 4.6 percent), followed by Florida (21,500 jobs, 3.9 percent) and California (17,400 jobs, 2.0 percent). Utah added the highest percentage of construction jobs (7.5 percent, 8,000 jobs) over 12 months, followed by New Mexico (7.1 percent, 3,400 jobs) and North Dakota (6.5 percent, 1,800 jobs).

Seventeen states and the District of Columbia shed construction jobs between January 2019 and January 2020, while employment was flat in Kansas. Louisiana lost the most construction jobs (-15,200 jobs, -10.1 percent). Other states with substantial job losses include West Virginia (-5,100 jobs, -13.0 percent) and Illinois (-2,400 jobs, -1.1 percent). West Virginia lost the highest percentage of construction jobs over 12 months, followed by Louisiana and Vermont (-3.0 percent, -800 jobs).

New York added the most construction jobs between December and January (4,700 jobs, 1.2 percent), followed by Pennsylvania (4,400 jobs, 1.7 percent), Florida (3,600 jobs, 0.6 percent) and Maryland (3,500 jobs, 2.1 percent). New Hampshire added the highest percentage of construction jobs (3.5 percent, 1,000 jobs), followed by Delaware (2.7 percent, 600 jobs), Arkansas (2.5 percent, 1,300 jobs), West Virginia (2.4 percent, 800 jobs) and Maryland.

Construction employment decreased from December to January in 16 states and was unchanged in Rhode Island, South Carolina and D.C. Washington state lost the largest number of construction jobs (-3,500 jobs, -1.6 percent),

followed by California (-2,400 jobs, -0.3 percent), Oregon (-1,400 jobs, -1.3 percent) and Alabama (-1,300 jobs, -1.4 percent). Washington also had the largest percentage decline for the month, followed by Alabama, Oregon and Hawaii (-1.3 percent, -500 jobs).

Association officials cautioned that the coronavirus is likely to have a significant impact on construction employment and urged federal officials to take steps to mitigate the impact. Those measures should include fashioning a more realistic Family Medical Leave proposal that won't force unnecessary layoff or bankruptcies as part of the coronavirus legislation, providing flexible schedules for contractors working on federally funded projects and boosting investments in infrastructure and other public works.

"There is no doubt the coronavirus will have a significant impact on our economy, including the construction sector," said Stephen E. Sandherr, the association's chief executive officer. "That is why federal officials should act quickly to protect employers and employees, provide contractors with greater flexibility and offset the inevitable private-sector slowdown in construction demand."



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Nortek Air Solutions Donates Eight Custom HVAC Air Handlers to New Construction Education Facility

<u>Dallas' state-of-the-art Construction Sciences Building promises to help reverse predicted skilled labor</u> <u>shortages in HVAC, plumbing, electrical and other building trades.</u>

St. Louis- Nortek Air Solutions (NAS), the largest manufacturer of custom HVAC equipment in North America, has donated eight custom Temtrol® HVAC units to the \$37-million Construction Sciences Building (CSB), Coppell, Texas, which promises to be one of the most state-of-the-art construction trades education building in the nation.

The 97,000-square-foot facility is spearheaded by a longtime partnership between the Dallas County Community College District (DCCCD) and the Construction Education Foundation (CEF), a self-supporting workforce development organization that connects the greater Dallas area's construction

trades with education. Even though the facility's ground breaking on the DCCCD's North Lake College campus was only last June and completion isn't expected until late 2020, the CSB is already considered a benchmark education role model by the construction trade industry, according to Jane Hanna, president, CEF. "The CSB is important because CEF research reveals that there will be a 1.4-million trade professional shortage by 2020," said Hanna. "The average age of all trade professionals currently working in the field is 51 years old, and 41-percent of today's construction workforce will retire by 2031."

NAS is donating six indoor air handlers totaling 70,250-CFM and

two rooftop DOAS systems. The air handlers' efficient Fanwall® technology and one DOAS' total energy wheel will both contribute credits to the building's Leadership in Energy and Environmental Design (LEED®) Silver application, according to Lauren Berry, P.E., LEED AP, senior associate at the project's consulting engineer firm, ME Engineers, Dallas.

"As a contributing sponsor, NAS and its president, Buddy Doll, really stepped up with this very sizeable donation of equipment in an effort to give back to the North Texas construction industry," said Rusty Vaughn, CSB project capital campaign co-chair and the vice president—

business development at NAS' local HVAC manufacturer's representative, Texas AirSystems, Irving, Texas.

While most commercial buildings conceal functioning components in closed spaces inaccessible to the public, the entire CSB facility-ranging from plumbing, electrical, carpentry, life/safety and every other imaginable trade disciplinewill offer students a hands-on experience in addition to 30 classrooms/labs. For example, HVAC students will functioning air handling systems through glass enclosed mechanical rooms; and recessed piping chases will have cutaway views for observation, as well as functioning

hands-on equipment experiences in the HVAC, sheet metal and welding/pipefitting labs.

Furthermore, students explore the air handling units' proprietary Integrated Thermal-Break Frame (ITF), which features energy-efficient three-inch foam heavy-duty 16-gauge metal exterior panels, 20-gauge interior liners and a fully-welded base. models will withstand Dallas' frequent high tornadic-like winds because of the ITF design, which recently exhibited the HVAC industry's highest air handler wind load rating and wall pressure tests, according to the stringent certification processes of Miami-Dade County (Fla.).



Register At: WWW.TACCAGH.ORG —>Under Upcoming Meetings

(713) 781-4822

HARSHAW con't

General Breakdown

Departmentalizing Worksheet

Company Name: Dealer name goes here

Fiscal Period: Fiscal Period Here

From the Income	Original D	ata	Installation		Service	
Department type code						
Statement	Dollars	% Sales	Dollars	% Sales	Dollars	% Sales
Sales	\$3,000,000	100.0%	\$2,300,000	100.0%	\$700,000	100.0%
Cost of Sales	\$1,805,314	60.2%				
Labor	\$720,000	24.0%	\$476,000	20.7%	\$244,000	34.9%
Labor percentages	And Annual Control	The second of	66.1%		51.3%	
Parts	\$72,000	2.4%			\$72,000	10.3%
Remaining C. O. S.	\$1,013,314		\$1,013,314			
Gross Margin	\$1,194,686	39.8%	\$810,686	35.2%	\$384,000	54.9%
Overhead	\$1,014,567	33.8%				
Sales specific overhead	\$48,000		\$48,000			
Service specific o'head	\$72,000		- Comment of the Comment		\$72,000	10.3%
Overhead left	\$894,567				-	
Overhead allocation			\$591,408		\$303,159	
Departmental Overhead			\$639,408	27.8%	\$375,159	53.6%
Net Margin	\$180,119	6.0%	\$171,278	7.4%	\$8,841	1.3%

Breakdown of Six Departments

Departmentalizing Worksheet

Company Name: Dealer name goes her

\$180,119

From the Income Department type code 100.09 100.09 ost of Sales 60.29 13.89 36.09 33.39 17.49 23.19 31.59 #DIV/0 Labor percentages #DIV/0 10.69 Remaining C. O. S. \$242,314 \$286,371 \$237,909 \$1,013,314 44.1% \$202,663 44.19 44.19 44.1% \$0 #DIV/0! 0.0% 0.09 Gross Margin 39.89 \$1,194,686 \$231,686 42.1% \$177,337 38.6% \$213,629 32.99 \$132,091 24.59 #DIV/0! \$213,508 53.4% \$170,492 56.89 \$1,014,567 33.89 \$48,000 7.0% #DIV/0 Sales specific overhea \$32,000 \$40,000 13.39 0.0% Service specific o'head 0.0% #DIV/0! 8.0% \$894,567 \$94,427 \$99,396 \$186,368 \$211,217 \$178,913 \$124,245 Overhead allocation 17.2% 21.6% 30.29 46.2% #DIV/0 52.79 54.7% Departmental Overhea \$164,245

Note the tiny red triangles that appear at the upper right corner of some cells. These red triangles are flags that tell you there is a hint here to help you work the spreadsheet.

First, make entries in any

cell with a yellow background.

Granted, the details on the six departments are small and hard to read but let me give you the quick summary.

Note that the general income statement shows

\$3,000,000 in sales (100%), \$1,805,314 in cost of goods sold (60%), \$1,194,686 in gross margin (40%), \$1,014,567 in overhead (34%) and net profit of \$180,119 (6%).

The general breakdown

Commercial Replacement, while the ugly step-child is Residential Replacement (losing 22%). (And I would bet that the Residential Replacement department is chasing down all those high

(Installation

And

allocated

and

shows a sharp difference in the

notice

allocated the net overhead to

each department based on that

department's labor bill to the

total labor for the company.

Therefore, since Commercial

Replacement's labor is 14%

of the total company's labor,

it gets 14% of the overhead,

while Residential Replacement

eats up 32% of the company's

labor and thus gets over twice

as much overhead charged to it.

shows that the most profitable

(at

by-department

department

The detailed department-

breakdown

25%!) is

overhead:

numbers for each department.

Service)

how

his divisor would be 0.50 and his quote would be \$18,000.

But now that he knows his internal numbers, he approaches the job with COWL. First, note that the job's ratio of material to labor is \$7,000 / \$2,000 =

labor / low material jobs because the owner bids his jobs the wrong way. Doh!)

Applying This to a Job

Let's say that this business owner has a job to bid in the Residential Replacement department. The owner used the single factor pricing method (until he read my column from last month). The job's material load is \$7,000 while labor is estimated to come in at (or near) \$2,000. Using his old income statement, with a gross margin of 40%, the contractor would divide the total costs (\$7,000 + \$2,000 = \$9,000) by (40% + the profit goal). Let's say he wants 10% net profit. So

3.5 to 1. Historically, his ratio is \$1,013,314 / \$720,000 = 1.41. So this job will make his business stronger.

Using COWL methods, he finds that in the Residential Replacement department, the ratio of overhead to labor is \$249,217 / \$170,000 = 1.47. So for every dollar of labor, he needs to reserve \$1.47 for overhead. So here is how he bids the job:

Material\$7,000

Labor\$2,000

Overhead\$2,932

(\$2,000 x 1.47)

TOTAL COSTS \$11,932

For 10% profit...\$11,932 / 0.90 = \$13,258

Wow! That is \$4,742 lower than the SF price he would have bid this nice job at. (And had he used SF, he'd be whistling in the dark...)

How to Get the Spreadsheet

To get a copy of the Excel spreadsheet (it should be okay for Excel 2010 and later), send an email to the publisher (llackey@ac-today.com) and he can get hold of me and I'll email you the spreadsheet. And it won't cost you a dime (and it may save you hundreds of thousands of dollars...)

Here is to a stunning 2020, Covid19 or not!

HINHAW con't

We also have trivia details posted: Bob's high school nickname, Amber's first car, that sort of thing. Anyone can post positive messages; the idea is to lift us all up.

The concept is to get the team working as a team, to make sure everyone feels like an integral part of the customer solution process. When each employee feels important, they convey that feeling of confidence to the customers, it becomes much easier to work through the obstacles that we may find on the road to profits!

By the way, just had a group into our headquarters for some training, someone shared a concept on keeping since employees, people are at a premium in our industry. Set up an employee program, where you work to keep the techs, installers, and office staff on your team so they won't drift to another company. Celebrate a successful month with a dinner, maybe reward team members with a tool allowance, fishing trip, house

cleaning, whatever makes sense to show them you appreciate them. Again, it doesn't have to be a week in Hawaii, but it shows that you want them to stay.

Take a look at how you receive the new person, how you can help them get integrated into your culture as soon as possible. You hired them because they can do something needed for your company, help them get there faster, feel better about themselves. It will pay dividends.

Thanks, we'll talk later.

SMACNA Applauds U.S. Department of Labor for Excluding Construction in the Industry-Recognized Apprenticeship Program Final Rule

Chantilly, Va. – The Sheet Metal and Air Conditioning Contractors' National Association (SMACNA), the leader in promoting quality and excellence in the sheet metal and air conditioning industry, announced its support of the final rule by the U.S. Department of Labor regarding Industry-Recognized Apprenticeship Programs (IRAPs). The new rule establishes a process for third-party entities in a wide variety of industries to create apprenticeship programs, appropriately but exempts construction. DOL This longaction the preserves standing, well-established and highly successful registered apprenticeship program model used in the construction industry for more than 80 years.

SMACNA and its allies in the skilled specialty contractor sector of the construction industry have been vocal supporters of exempting the construction industry from IRAPs. "We applaud the current Administration for following the advice of leading management and labor organizations in making their decision to reaffirm the efficacy of registered apprenticeship programs in the construction industry," said Vince Sandusky, SMACNA's Chief Executive Officer.

To learn more about SMACNA's government affairs efforts and workforce initiatives, please visit www.SMACNA.org.



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

the Role of HVAC Systems on Infection Control

Atlanta– ASHRAE will offer a course on the role of HVAC systems in infection control in hospitals.

The course, "Designing and Operating High-Performing Healthcare HVAC Systems," is one of 11 offerings in ASHRAE's Spring online instructor-led course series, taking place on April 7.

"Infection control is a primary purpose of HVAC systems in hospitals," said course instructor, Dan Koenigshofer PE, MS Public Health, HFDP, SASHE. "Although COVID-19 is not considered an airborne contagion, the design and operation strategies described in this course may be helpful during the current pandemic. It appears that COVID-19 can be transmitted through aerosols. The movement and concentration of aerosols can be influenced by the HVAC system. Thus, it's important for hospital engineers to understand the methods to remove and reduce airborne aerosols, using the HVAC system."

This three-hour course focuses on the design and operation of HVAC systems in healthcare facilities. The course details the relationship of infection control and HVAC design, including application of ASHRAE's HVAC Design Manual for Hospitals and Clinics, Second Edition, and ANSI/ASHRAE/ASHE Standard 170-2017 Ventilation of Health Care Facilities. Key elements covered in the course include: infection control, comfort, reliability, safety, maintenance, energy, and flexibility.

Course topics are as follows:

- Discussion of costs of Hospital-Associated Infections (HAI) in the U.S.
- Controversial issues regarding HVAC and infection control such as air change rates and levels of filtration
- Engineering methods to maintain proper temperature and humidity
- How/why to pressurize to move air from clean to less clean areas
 - The equation for the probability of getting an infection
- \bullet Reasons why the air velocity is limited deposition and thermal plume
- The design of airborne infectious isolation rooms, protective isolation rooms, operating rooms, emergency depts, sterile processing department and infection control risk assessments

The course will highlight the design, operation, and methods of filtration, UV lighting, and monitoring of pressure, temperature and

humidity in HVAC systems for healthcare facilities.

Participants can access this instructor-led course from anywhere with an Internet connection and earn continuing education units/professional development hours for each course completed.

To register, visit the ashrae.org/onlinecourses.

Call for Papers Announced for the 2021 ASHRAE Winter Conference in Chicago

Atlanta– ASHRAE announced a call for papers for its 2021 Winter Conference Jan. 23-27 at the Palmer House Hilton in Chicago. The deadline for abstract submissions is March 30, 2020. The 2021 AHR Expo will take place in conjunction with the conference, Jan. 25-27 at, McCormick Place.

"Engineers and designers are being tasked to take closer looks at buildings and their systems to provide comfort to the occupants while also finding ways to reduce the impact on the environment and energy use," said Maggie Moninski, chair of the 2021 conference. "The 2021 Winter Conference attendees will be given a great opportunity to learn from some of the leaders of the industry with a focus on the foundations of the HVAC&R industry along with specialty topics like *International Design* and the *Future of HVAC Work*."

The "Systems and Equipment" track will focus on the development of new systems and equipment, improvements to existing systems and equipment and the proper application and operation of systems and equipment.

The "HVAC&R Fundamentals and Applications" track lays the foundation for understanding applications in engineering. Key components include thermodynamics, psychrometrics, fluid and mass flow. This track provides opportunities for papers of varying levels across a large topic base. Concepts, design elements and shared experiences for theoretical and applied concepts of HVAC&R design are included.

With significant changes on the horizon for refrigerant regulations, along with new applications for refrigeration systems being frequently applied, there is more need than ever to understand both the fundamental and advanced concepts and issues related to refrigeration. Papers and programs in the "*Refrigeration and Refrigerants*" track will focus on refrigerants, refrigerant regulation, refrigeration cycles and refrigeration applications.

HVAC&R systems play a significant role in maintaining indoor environmental conditions. As people spend increasingly more time in the built environment, health concerns are becoming paramount to design. The "Environmental Health Through IEQ" track will seek papers and programs on developing, evaluating and predicting optimal indoor environmental conditions, especially as they pertain to environmental health.

The "Building Performance and Commissioning for Operation and Management" will include papers and presentations surrounding building operation and commissioning practices as well as case studies in performance and commissioning.

The "Energy Conservation" track will highlight case studies and research that expand on the simple to the complex energy savings measures being implemented in today's and tomorrow's designs.

As an international organization, ASHRAE strives to meet the needs of a global membership. HVAC&R systems vary globally and the "*International Design*" track provides an opportunity to share innovative and necessary design elements that can be shared internationally.

<u>Abstracts submissions</u> for conference papers are due March 30, 2020. If accepted, final papers will be due July 8, 2020.

In addition, technical papers (complete 30-page maximum papers, published in "ASHRAE Transactions") are due March 30, 2020.

For more information on the call for papers and the 2021 ASHRAE Winter Conference, visit ashrae.org/chicago.

Registration Open for ASHRAE Learning Institute's 2020 Spring Online Course Series

Atlanta—Registration is now open for the 2020 Spring online instructor-led course series from ASHRAE Learning Institute (ALI). The 11 online offerings, including three new courses, run from April through June.

The new course "Principles of Building Commissioning: ASHRAE Guideline 0 and Standard 202," taking place on April 20, explores the implications of employing the ASHRAE commissioning process during the acquisition of a building. The course references ASHRAE Guideline 0, *The Commissioning Process* and ASHRAE/IES Standard 202, *Commissioning Process for Buildings and Systems*.

"V in HVAC – What, Why, Where, How and How Much," scheduled for May 14, teaches the basics of the ventilation and provides the current concepts behind the new ANSI/ASHRAE Standard 62.1-2019, *Ventilation for Acceptable Indoor Air Quality*. This new course covers the scope, application, and multiple compliance paths available in the standard, including the ventilation rate procedure, indoor air quality procedure, and natural ventilation procedure.

Based on the new ASHRAE Cold-Climate Building Design Guide, the course Designing for Cold Climates, offered on June 2, enables engineers to develop design strategies and solutions that can be successfully applied in cold climates. The course covers health and safety in cold climates and how to achieve energy-efficient and net zero design in these environments.

The following is the full schedule of online instructor-led course offerings:

21 Apr 2020

New! Principles of Building Commissioning: ASHRAE Guideline 0 and Standard 202

23 Apr 2020

Air-to-Air Energy Recovery Applications:

Best Practices (Energy Saving Practices)

30 Apr 2020

Variable Refrigerant Flow System: Design and Applications

05 May 2020

Updated! Latest in High-Performance Dedicated Outdoor Air Systems (DOAS)

07 May 2020

Solar PV and Thermal Systems Analysis and Design

13 May 2020

Designing and Operating High-Performing Healthcare HVAC Systems

14 May 2020

New! V in HVAC - What, Why, Where, How, and How Much

21 May 2020

Humidity Control I: Design Tips and Traps IAQ Practices

26 May 2020

Updated! Save 40% by Complying with Standard 90.1-2019

02 Jun 2020

New! Designing for Cold Climates

09 Jun 2020

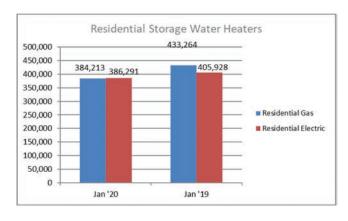
Successfully Managing the Risk of Legionellosis Using ASHRAE Standard 188

To register, visit the ashrae.org/onlinecourses.

AHRI Releases January 2020 U.S. Heating and Cooling Equipment Shipment Data

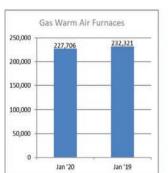
Residential Storage Water Heaters

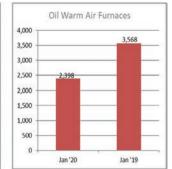
U.S. shipments of residential gas storage water heaters for January 2020 decreased 11.3 percent to 384,213 units, down from 433,264 units shipped in January 2019. Residential electric storage water heater shipment saw a 4.8 percent decrease in January 2020 to 386,291 units, down from 405,928 units shipped in January 2019.



Warm Air Furnaces

U.S. shipments of gas warm air furnaces for January 2020 decreased 2 percent to 227,706 units, down from 232,321 units shipped in January 2019. Oil warm air furnace shipments decreased 32.8 percent to 2,398 units in January 2020, down from 3,568 units shipped in January 2019.



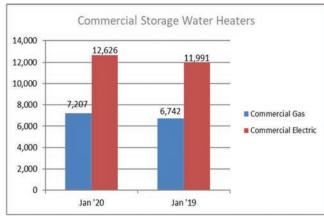


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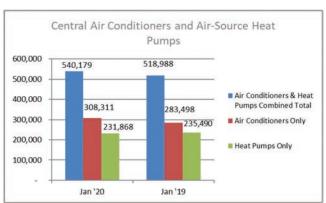
Commercial Storage Water Heaters

Commercial gas storage water heater shipments increased 6.9 percent in January 2020 to 7,207 units, up from 6,742 units shipped in January 2019. Commercial electric storage water heater shipments increased 5.3 percent in January 2020 to 12,626 units, up from 11,991 units shipped in January 2019.



Central Air Conditioners and Air-Source Heat Pumps

U.S. shipments of central air conditioners and air-source heat pumps totaled 540,179 units in January 2020, up 4.1 percent from 518,988 units shipped in January 2019. U.S. shipments of air conditioners increased 8.8 percent to 308,311 units, up from 283,498 units shipped in January 2019. U.S. shipments of air-source heat pumps decreased 1.5 percent to 231,868 units, down from 235,490 units shipped in January 2019.



U.S. Manufacturers' Shipments of Central Air Conditioners and Air-Source Heat Pumps

Month		YTD				
Size Description (000) BTUH	Total	% Change from 2019	Size Descriptio n (000) BTUH	Total	% Change from 2019	
Under 16.5	22,150	-18.3	Under 16.5	22,150	-18.3	
16.5-21.9	56,601	5.4	16.5-21.9	56,601	5.4	
22-26.9	109,012	8.5	22-26.9	109,012	8.5	
27-32.9	81,483	7.0	27-32.9	81,483	7.0	
33-38.9	110,979	5.5	33-38.9	110,979	5.5	
39-43.9	39,595	0.6	39-43.9	39,595	0.6	
44-53.9	58,454	5.0	44-53.9	58,454	5.0	
54-64.9	43,897	-21.1	54-64.9	43,897	-21.1	
65-96.9	6,669	-8.6	65-96.9	6,669	-8.6	
97-134.9	4,708	-10.8	97-134.9	4,708	-10.8	
135-184.9	3,074	-5.3	135-184.9	3,074	-5.3	
185-249.9	1,442	-5.6	185-249.9	1,442	-5.6	
250-319.9	924	-13.2	250-319.9	924	-13.2	
320-379.9	263	6.9	320-379.9	263	6.9	
380-539.9	328	4.8	380-539.9	328	4.8	
540-639.9	246	15.0	540-639.9	246	15.0	
640-799.9	91	-18.0	640 & Over	91	-18.0	
800.0-899.9	60	-24.1	800.0-899.9	60	-24.1	
900.0-999.9	88	72.5	900.0-999.9	88	72.5	
1,000.0-1,199.9	36	0.0	1,000.0-1,19	36	0.0	
1,200.0 & Ove	79	-16.0	1,200.0 & O	79	-16.0	
TOTAL	540,179	4.1	TOTAL	540,179	4.1	

BTUHs of 64.9 and below are for residential units; 65.0 and above for commercial.

NOTE: A shipment is defined as when a unit transfers ownership; a consignment is not a transfer of ownership. Industry data is aggregated from the information supplied by AHRI member companies that participate in the statistics program and could be subject to revision. Published year-to-date data is inclusive of all revisions. No other AHRI data (e.g., by state or region) is available to the general public other than that published. AHRI does not conduct any market forecasting and is not qualified to discuss market trends. For previous monthly shipment releases and historical data, please see http://www.ahrinet.org/statistics.







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CALENDAR OF EVENTS

NEBB Reschedules the 2020 Annual Conference for August 18th - 20th, 2020

NEBB's main priority is always the health and safety of the community. We have been actively monitoring the developments of the COVID-19 outbreak and based on uncertainties, as previously announced, we've decided to postpone the NEBB 2020 Annual Conference until late summer 2020.

The new dates for the NEBB Conference are Tuesday, August 18th - Thursday, August 20th, 2020, with the location and program offerings remaining the same. Thank you for your patience while we are finalizing arrangements with the Greenbrier.

We are committed to providing an innovative event that will maximize value for attendees through education from our staff, industry experts, and resource partners in a comfortable environment and are looking forward to making the 2020 Conference the best one yet!

All purchases for the original dates will be valid for the rescheduled event. **NEBB team** members will be reaching out personally to all current registrants, partners, and sponsors to make any necessary arrangements based on the new dates. Please give us a few weeks to gather the necessary information, and we will be in touch!

We will continue to communicate regularly to inform everyone of event news and updates as they develop. Thank you for your continued support. We look forward to seeing you at the Greenbrier later this summer!!!



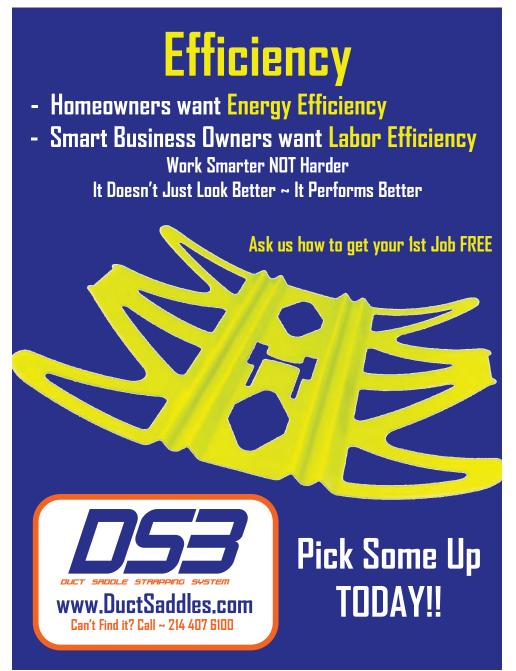
In order to protect our valuable customers and employees during the COVID-19 pandemic and in accordance with local ordinances, Johnstone Supply is suspending our on site training until further notice.

We are working to bring you online webinar training in the very near future. If you are interested in participating in this training please email me at juan.villela@johnstonesupply.com to be placed on an email list for class availability and registration information. Much of the training will be provided free of charge to our valued customers.

Please stay safe and work safe, practice preventive measures to minimize your exposure and the exposure of those you come in contact with.

Juan Villela,

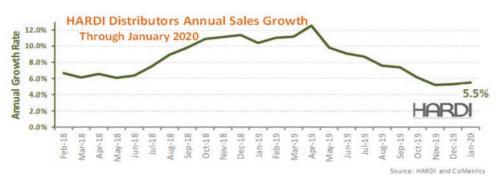
Training & Tech Support Specialist | Johnstone Supply 210-829-1934 ext. 155 | juan.villela@johnstonesupply.com



HARDI

HARDI Distributors Report 0.7% Percent Revenue Growth in January

Columbus, Ohio – Heating, Air-conditioning & Refrigeration Distributors International (HARDI) released its monthly TRENDS report, showing the average sales performance by HARDI distributors was an increase of 0.7% percent during January 2020.



The average annual sales growth for the 12 months through January 2020 is 5.5 percent.

"Heating degree days were below normal in 47 of the 48 states," said HARDI Market Research & Benchmarking Analyst Brian Loftus. "The average sales growth for the month was about flat to start the new year, while the dollar weighted growth was 2.5%. The average annual growth rate ticked up a bit to 5.5%."

The Days Sales Outstanding (DSO), a measure of how quickly customers pay their bills, is near 51 days. "The DSO was a bit higher than the recent Decembers," said Loftus. "This is the third consecutive month that the DSO has been about a day or more higher than the prior year."

"The economy has been growing in the 2% area. The consensus expectation before the impact of COVID-19 was for that pace to ease in the new year," said Loftus. "The financial markets seem to be indicating those expectations need to be trimmed further. The economic data will begin to reflect our interconnected world, like increasing delivery times and inventory shortages."

HARDI members do not receive financial compensation in exchange for their monthly sales data and can discontinue their participation without prior notice or penalty. Participation is voluntary, and the depth of market coverage varies from region to region. An independent entity collects and compiles the data that can include products not directly associated with the HVACR industry.

ABOUT HARDI

HARDI (Heating, Air-conditioning and Refrigeration Distributors International) is the single voice of wholesale distribution within the HVACR industry.

HARDI members market, distribute, and support heating, air-conditioning, and refrigeration equipment, parts and supplies. HARDI Distributor members serve installation and service/replacement contractors in residential and commercial markets, as well as commercial/industrial and institutional maintenance staffs. HARDI proudly represents more than 480 distributor members representing more than 5,000 branch locations, and close to 500 suppliers, manufacturer representatives and service vendors.



CASTILLO TRAINING

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Law, ECM, Thermo Ref, Codes, Osha & Safety Wednesday April 8, 2020 May 6, 2020 Location: Mechanical Reps 9407 Middlex Drive

April 18, 2020 **Saturday** May 16, 2020 Location: Southern Careers – 6963 NW Loop 410 Location: Victoria, TX – Friday, May 22, 2020 TDLR No. 1362 Class No. 20982

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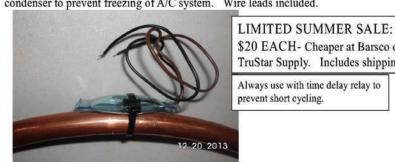


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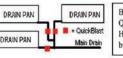
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