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Chris Howells

Aprilaire® - Senior Product Manager Ventilation and Purification Systems
HVAC & IAQ: What Works!

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This week we welcomed Chris Howells Aprilaire®'s Senior Product Manager Ventilation and Purification Systems to talk HVAC and IAQ. We have very recently had some excellent building science shows with Joe Lstiburek and Nate Adams. It seemed like a good time a major manufacturers' Product Manager for Ventilation and Purification to tell us what he sees out in the field.



Chris grew up working in the HVAC industry with his grandfather in North Texas. That experience has led to over 25 years in the trade. He spent most of his career thus far in the field as a service technician, installer, comfort advisor and owner of a business. After his time in the field, he served as a Technical Service Manager and trainer for a distributor of a major equipment line.

He started his career with Aprilaire in 2015 and has filled multiple roles as a District Sales Manager and Regional Manager. Now as the Senior Product Manager of ventilation and purification, Chris continues to express his passion for the Building Science and HVAC to all in the industry. Serving others by providing the knowledge of all the attributes that create a more comfortable and healthier environment for the occupants while offering the home the protection it needs to facilitate a healthy home is what drives Chris' unmatched passion for the Indoor Air Quality industry.

Chris has trained thousands of people on the importance of IAQ within the industry including HVAC contractors, distributors, engineers, new home sales teams, raters and inspectors. Aprilaire® believes everyone deserves healthy air, especially in their own homes! That starts with knowledge of what makes up the quality of the air in our homes and buildings. Chris and Aprilaire® were grateful for the opportunity to be a part of this event today.

NUGGETS MINED FROM TODAY'S SHOW

Aprilaire® introduced the first humidifier and has continued to remain relevant by expanding its offerings into a holistic approach offering: humidification, dehumidification, filtration, controls, improving comfort and creating a healthier home.

Aprilaire® began selling whole home dehumidifiers in 2014 and has increased both efficiency and performance. Aprilaire® products are Energy Star Max rated. Aprilaire®'s ventilating dehumidifiers will work in climate zones 1A-5A. Dehumidifiers are versatile and can be used in different ways, attached to the system or operated free standing in a basement, attic or crawlspace.

As a manufacturer how is Aprilaire® different? Manufacturers of HVAC equipment focus on selling HVAC equipment, Aprilaire® doesn't make HVAC systems they focus on making components which help HVAC systems improve IAQ.

Better quality air can improve comfort.

Many HVAC contractors misunderstand the opportunity and only offer to sell a replacement system when today's consumer wants more. HVAC contractors need to take a consulting approach and ask the right questions so that they better understand their customers and their needs and wants. Chris is an advocate of Nate Adam's "prescription based" approach.

As home construction has changed over time and is still changing, HVAC contractors need to learn more about building science to understand why we want to tighten the home and then cut a hole to bring in fresh air.

Chris had some great photos of common problems he sees in the field: new HVAC system with dirty blower housing due to drywall dust, filthy blowers due to lack of maintenance, filters installed backwards, fungal growth on components, etc. Aprilaire® offers high efficiency filter cabinets for use with PSC blowers which can't overcome pressure drop. Aprilaire® offers a 10 year clean coil commitment.

Filtration is airflow dependent. Filters should be selected based upon the needs of the occupants. Aprilaire® guarantees the quality of air which passes through its air filters. Aprilaire® builds more filtration into their filters by increasing the depth of their filters.

Aprilaire® offers high level filtration MERV 16. For chemicals, Aprilaire® offers an activated carbon option.

Aprilaire® advocates positive pressure systems, because positive pressurization is easier to control. Outdoor air being brought into the home needs to be filtered.

Because one humidifier won't work in every home and in every situation, Aprilaire® offers humidifier options. Adding humidity improves comfort at lower wet bulb temperatures. Initial costs and operating costs differ among humidifiers. To improve comfort in hot dry climates humidity is added to cooling.

1. Evaporative humidifiers have a fan and are attached directly to ductwork of gas fired forced air HVAC systems. Hot water cascades down a water panel. Small cups in the water panel improve performance. The water panel is treated with a water conditioning agent. Water panels should be replaced before each 'humidifying season'.
2. Steam humidifiers are recommended in the south when the HVAC systems have shorter run times. Aprilaire® steam humidifiers use electrode technology. With electrode technology, electrical current flows between submerged electrodes, resistance of the water to the electric current heats the water.

Chris is an advocate of the Rectorseal®EZ Trap® 3/4 in. Condensate Drain Trap with overflow switch. This allows the HVAC contractor to educate the homeowner of the quality of their air because those traps get dirty, murky and plug up. Why? That dirt and other airborne particulates are passing through the

filter and collecting on the evaporator coil or making its way back into the home potentially affecting the occupants.

Aprilaire® offers choices in controls from simple to sophisticated. There healthy home thermostat can control: temperature (heating/cooling), humidification, dehumidification and fresh air simultaneously on the same screen.

When it comes to product offerings, Aprilaire® doesn't market gimmickry. Aprilaire® relies on ASHRAE for peer reviewed scientific data and standards on: filtration, temperature, humidity and fresh air.

Chris' Final Comments:

- Understand the customer first.
- Take the time to invest in training.
- Align your training to what you are trying to accomplish.

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Z-Man signing off

Trivia:

Name the company from which former employees purchased patents and buildings to form the parent company of Aprilaire®?

Answer:

Burgess Battery Company

Answered by: Don Weekes