



Fresh Ideas for Indoor Air®

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FAQ — Air Cleaners

Question: I have seen and heard comments relating to leakage and bypass of air at the air cleaner. What is the significance and, more importantly, what is the difference between the two?

Answer: When used in reference to air cleaners, **leakage** is the amount of air that enters into the HVAC system through the air cleaner door and through cracks or openings in the cabinet.

Bypass, on the other hand, is the amount of air that comes down the ductwork and gets through the air cleaner, unfiltered, by going around the filtering media.

Leakage is a problem because the return ductwork is under negative pressure. The leakage that occurs has the effect of drawing unfiltered air into the blower from an unconditioned space which may be a basement, crawl space or attic.

The importance of **bypass** is that it reduces the air-cleaning function of the air cleaner. Your customers expect the air cleaner you install to efficiently clean all the air that passes through it. Air that bypasses the media is not being cleaned at all.

When considering which air cleaner to use, look for a product that addresses leakage at both the door and the outer housing seams where corners overlap or occur. Aprilaire Air Cleaners have cabinets, or outer housings, that are produced with overlapped cor-

ners to ensure no **leakage** can occur. The door has a broad, thick seal, which prevents air leakage between the door and the outer housing. This same seal is used to prevent air from bypassing the media which addresses the **bypass** part of your question.

In addition to the door seals, Aprilaire Air Cleaners use sealing rails at the top and bottom of the inner and outer housing. Additionally, a set of seals inside the inner housing and a seal in the back of the outer housing result in the lowest **bypass** possible.

When selecting an air cleaner, also examine the fit of the filter media. The fit should be precise without being tight. A loose fit is a sign that **bypass** is occurring. A tight fit may be a sign that **bypass** is occurring as a result of filtering media buckling. Aprilaire uses an inner housing that provides a smooth, precise fit while using effective design and properly placed seals. The result is the lowest **leakage** and **bypass** in the industry. ■

Let Us Know...

We welcome any comments and suggestions that you may have.

Please direct them to ndk@aprilaire.com (refer to Dealer Newsletter in the subject line).

Aprilaire Launches Contractor Inspired Premium Thermostat

NEW PRODUCT

In April the long-awaited release of the Aprilaire Model 8570 Premium Thermostat changed the industry's thermostat landscape. We say "long-awaited" because, through the design process, a lot of time was spent with contractors understanding what a premium thermostat needed to be and do to put profits back into premium thermostats.

Through this process we tested concepts and designs with contractors. Focus groups and one-on-one interviews along with plenty of field testing exposed this innovative thermostat to many loyal Aprilaire contractors quite some time ago. Since that time a steady stream of "when can I get that" has assured us that we've hit the mark.

Contractors said they wanted profitability

The Model 8570 is a single thermostat that controls virtually all types of heating and cooling equipment: single or multi-stage, heat/cool or heat pump and split system or rooftop. It even controls boilers, air handlers or radiant systems. This minimizes the number of thermostats that need to be stocked, it avoids those costly extra trips to the wholesaler and it breeds product familiarity, shortening the learning curve, and making your installers more productive.

When combined with an Aprilaire Automatic Humidifier, the Model 8570 simplifies the installation because no current-sensing relay or connection inside the equipment is required. The thermostat will also display indoor Rh and outdoor temperature, which is shared by the Automatic Humidifier Control eliminating redundant sensors. The Model 8570 will enhance the humidifier's performance through the ability to extend blower operation if the humidity setting is not achieved during the heat call. This is a perfect example of products working better together than if installed alone.

Equipped with service reminders, the Model 8570 will alert your customers when to service their accessories or equipment. Set by the installer, customers will be alerted when it is time to service their humidifier, change their air filter, and change their UV lamp or when general HVAC service is required. In addition it is *your* name and phone number that appear on the screen with an active reminder that assures that these profitable service calls come to you and not a competitor.

The Model 8570 is the perfect choice for your dual-fuel applications. With dual-fuel control capabilities built-in expensive add-on kits are a thing of the past. Through a two wire connection direct to an outdoor temperature sensor, the thermostat even provides adjustable high and low balance points.

Contractors said they wanted reduced call backs

Contractors we have spoken with have all said the same thing about programmable thermostats, "If they are hard to program, we'll get calls." These are not profitable calls, just plain nuisance calls.

Addressing this issue was a challenge. However, through consumer research and creative design, the Model 8570 truly delivers the easiest programming available. Utilizing a dot-matrix display and menu-driven approach, the thermostat operates much like a cell phone or ATM. Using plain language, changes are made by simply highlighting selections within a menu and selecting the change. It even automatically adjusts for daylight savings time if desired. It's easy, it's intuitive and it all but eliminates nuisance calls.



The Model 8570 is a trade-only thermostat. Your customer won't see the same product as they stroll down the aisle at do-it-yourself depot.

Take our simulator for a test drive at www.aprilairecontractor.com today and see for yourself just how easy the Model 8570 is to operate and program. ■

Light Commercial

The Model 8570 does more than control all types of equipment. It closes the gap between residential and light-commercial, through the unique ability to have its program schedule display either residential-type verbiage (wake, leave, return, sleep), or light-commercial verbiage (occupied, unoccupied). The Model 8570 is truly the only thermostat you need. It also has a lockout capability, so there's no more need for "lock boxes."

What's better than one Model 8570? — More 8570s...

AND THE NEW MODEL 6504 INTELLIGENT ZONED COMFORT CONTROL SYSTEM

Intelligent Zoned Comfort Control combines all that is good about the Aprilaire Model 8570 Premium Thermostat and takes zoning to the next level of comfort, control and convenience. The system works exclusively with the Model 8570 to control up to four zones and provides features never before thought possible in a zoned comfort system such as:

- Built-in ventilation control and fan cycling
- Humidifier and/or electronic air cleaner installation with no additional relays
- Contacts to control an ERV
- Self diagnostic capabilities and test button
- Global control
- Outdoor temperature to the humidifier and up to four thermostats - all with one sensor

What is “global control?” Global control is when any thermostat can control or view any other thermostat on the system, which provides the **ultimate in convenience for your customers**. They no-longer have to run all over the house turning off thermostats on the first mild day in spring or as they are rushing out of the house on vacation. With global control they can do it from any thermostat. They can even view outdoor temperature or indoor Rh at every thermostat without multiple sensors.

Convenient for them and convenient for you

The Model 6504 integrates with other Aprilaire Indoor Air Quality products to enhance their performance, simplify installation and share all kinds of important information.

The new panel controls single or multi-stage heat/cool systems or heat pumps. It controls dual fuel heat pumps without requiring an add-on kit. It also controls auxiliary heat based upon adjustable high/low balance points and outdoor temperature. The product also integrates with the Aprilaire Automatic Humidifier Control and shares outdoor temperature and indoor relative humidity with each thermostat.

Intelligent Installation

The Model 6504 is designed to be easily installed in **either new home installations or as a service replacement solution**.

The system only requires a four-wire connection with standard thermostat wire between the Model 6504 and the Model 8570 Thermostats. Set-up and troubleshooting is automatic with a self-diagnostic feature that confirms the wiring is correct which then informs the installer by using LED lights. A test button is also provided which tests each output sequentially so the installer can confirm operation of every component controlled by the system. The system, by means of the 8570, also has built-in service reminders for humidifiers, air cleaners and UV germicidal lamps. Additionally, there is a general HVAC service and a dealer identification feature reminding the customer whom to call and, more importantly, when to call.

The system not only controls the heating and cooling equipment, it also has built-in relays to activate an Aprilaire Electronic Air Cleaner and it can control an ERV. Additionally, the Model 6504 integrates with all Aprilaire Automatic Humidifiers, eliminating the need for an additional current-sensing relay or connection inside the equipment. It also provides blower extension for humidity control if a humidity call is not satisfied during a heat call.

The Model 6504 has the unique ability to control the quality and quantity of fresh air in the home by providing the functionality of a Ventilation Control System. Through the connection to a fresh air intake damper, the information known by the Model 6504 (outdoor temperature, indoor Rh and blower status run time) provides truly smart ventilation.

The Intelligent Zoned Comfort Control System provides contractors with the complete story on comfort, control and convenience; a message your customers will respond to. ■



Intelligent Solutions for indoor environments.

The Intelligent Solutions symbol is your assurance that this Aprilaire product will provide more value when combined with other Aprilaire Indoor Air Quality and comfort products. Go to www.aprilairecontractor.com to learn more about how this concept delivers on helping to build your business.

Building Science-Ventilation

TECHNICAL FEATURE

In the Building America Review Plan Building Science Corporation (BSC) recommends the **Aprilaire Ventilation Control System, Model 8126**, to its network of builders all over the country. BSC meets with and advises builders throughout North America on the best science and technology to build new homes. BSC has a large national presence and has built or tested over 10,000 homes to date. They

focus on technology consulting, with one area of specialization being improved indoor air quality. BSC works with leading national builders such as Pulte Homes, Ryland Homes, Del Webb, and Centex Homes. If you are affiliated with any of these companies, be sure to inform them that BSC recommends Aprilaire's Ventilation Control System as part of proper building design according to their review

plan's document. This is a great opportunity for you to educate your builders on the importance of including ventilation in their homes. A recommendation by a recognized third party will add credibility to your sales pitch. **Follow up today with your builders** showing them that this nationally accredited building company recognizes the need for proper ventilation and grow your sales. ■

Spring Clean & Checks — Time for UV

SALES OPPORTUNITY

It's that time of year again, when everyone starts to think about warmer weather, summer hobbies, lawn mowing and, if you are in the HVAC business, spring-clean and checks!

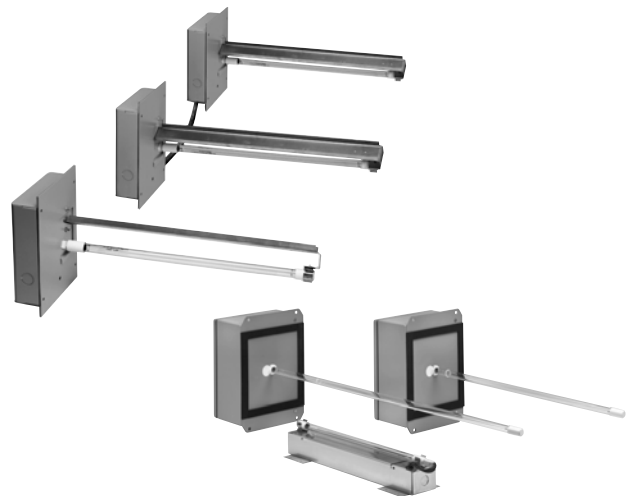
It's time to get those air conditioners ready for busy season. This often includes changing the HVAC equipment's filter or air cleaner media, inspecting the cooling coils and blower wheels, inspecting the condensing unit/coil, checking the temperature drop across the coil, checking the coolant as needed, and replacing the UV lamp.

What? Your customer does not have a UV germicidal lamp installed in their system? In that case the final step in your spring clean-and-check should be to sell your customers an Aprilaire UV Germicidal Lamp for their systems. No matter if your customers are residential or light-commercial, Aprilaire offers the right product for their equipment.

UV germicidal lamps offer benefits that both the homeowner and the business owner need: **Energy Savings** and a **Healthier Indoor Environment**.

Energy savings is achieved by keeping the coil clean. A clean coil year-round will continue to operate at its original peak operating efficiency. It will also reduce future maintenance costs and possible downtime.

A healthier indoor environment is obtained because microorganisms and biological growth are eliminated at the source and are prevented from returning due the constant illumination of the coil and drain pan that UV germicidal lamps provide. (A recent medical study published in *The Lancet*, a Canadian medical journal proved this point.)



These two benefits are great for the home and building owner but what about you, the contractor?

You will get to sell new products with an annual replacement part that is quick and easy to replace. This will get your techs out on more profitable jobs, instead of cleaning coils and blower wheels. Quit spending time using harsh chemicals that can be both dangerous and messy.

Make replacement UV lamps part of your spring-clean and checks by selling Aprilaire UV Germicidal Lamps today. **See your Aprilaire district sales manager about UV promotional opportunities.** ■