

Aprilaire®

Dehumidifier Product & Application Guide



Provide the Solution to
Excess Moisture Problems



Welcome to Aprilaire

Aprilaire offers a complete line of dehumidifiers designed to meet the ever increasing needs of today's homeowner.

When you speak, we listen. Aprilaire is committed to using your feedback to engineer top notch products and make ongoing improvements. Use this guide to review the latest results of your input and our research, and continue to sell Aprilaire dehumidifiers with confidence.

Customer service agents are available Monday through Friday from 7:00 am through 5:00 pm (CST) and can be reached by phone at 800.334.6011 or by e-mail at support@aprilair.com.

Make dehumidification a larger part of your business.

Many conditions can create humidity problems. In fact, humidity control is one of the most desired consumer needs.* Inform your customer of the importance of humidity control. Understand what conditions require the assistance of a dedicated, high-efficiency dehumidifier.

Air Conditioner/Heat Pump –Latent Load Issues

- + Energy efficient tight home construction with low infiltration rates reduces sensible demand and air conditioning run time, resulting in less latent humidity removal when it's needed most.
- + The HVAC equipment includes an oversized air conditioner/heat pump. The quick cycling does not allow enough time to remove the latent load.
- + Homeowners often must overcool their homes to remove humidity, making them chilly even in summer. Many times this happens when the thermostat drives temperature under the set point to achieve desired RH set point.

Multi-Unit Residences

- + Condos and townhouses in multi-unit structures have many residences with limited external facing walls. These interior units are surrounded by conditioned space, so their systems have reduced run times; often not enough to remove the daily moisture gain in the home.
- + In multi-unit or single family homes where there are primarily part-time residences, air conditioners are run less often to save energy. Moisture builds in the space and creates property damage.

Attics

- + Tightening up a house by sealing up the attic and other drafty areas is a great way to save money. However, tightening the home can also lead to a buildup of damaging, unhealthy levels of humidity. A high-capacity dehumidifier placed in a sealed attic can reduce indoor RH – providing consumers improved energy savings without damaging the home or sacrificing health and comfort.

Southern–Shoulder Season

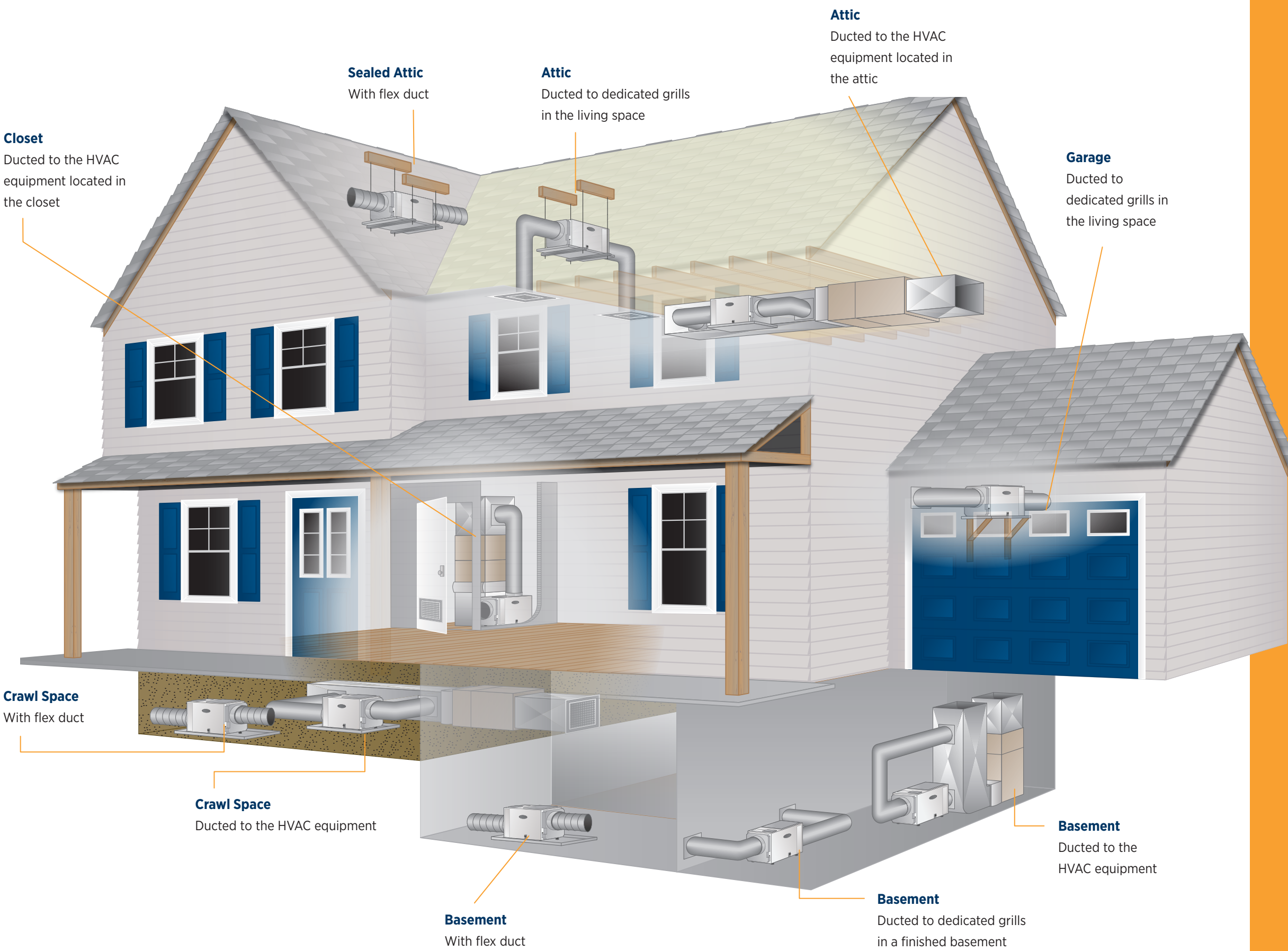
- + In the south, there are many months between summer and winter when the outside temperature is below 76 degrees and the relative humidity is above 60%. In these conditions the air conditioner run time is not adequate to remove excess humidity. These conditions can exist over 70% of the time** between October and April.
- + In the south there are many part-time, seasonal residents who are not at home in the summer months and air conditioners run less often, therefore humidity continues to build.

Northern–Basements

- + In spring and summer, the temperature of the ground is around 54 degrees and full of moisture. In a basement, you cannot avoid high humidity. This is why most homes with a basement have a portable dehumidifier. Millions are sold each year. Often these units have a hard time keeping up with the constant infiltration of dampness. In fact, the typical portable dehumidifier cycles on and off over 300 times per day. This lowers their capacity and life expectancy.

Crawl Spaces

- + In a crawl space, wood floor joists are typically the coldest surface. This is because the interior of the home is air conditioned and the cold air temperature transfers into the structure. If the dew point is not controlled, water will form on the surface of the floor joists, over time, causing the wood to decay and lose its strength. Sealing the crawl space and managing the dew point is the only way to protect your home from real issues.



Home Applications

Aprilaire dehumidifiers are designed to make installation easy in many applications. Our line includes several sizes and capacities with models that provide adjustable top or side discharge, top or side control and several external control options.

Installation Options for Every Home

No matter what region of the country you live in, an Aprilaire dehumidifier can be installed where it will most effectively solve your customers' moisture and high humidity problems:

- + Attics
- + Basements
- + Closets
- + Crawl Spaces
- + Garages

What Makes Our Dehumidifiers Better



Duct Collar

10" in diameter with retention tabs

Fresh Air

- + Ability to pull fresh air into the home (per ASHRAE 62.2-2010)
- + Dehumidifies ventilated air

Water Removal Per Day

Industry leading capacities (70, 95, and 130 pint per day options)

Whisper Quiet

Air flow managed to minimize noise while maximizing efficiency

Digital Control

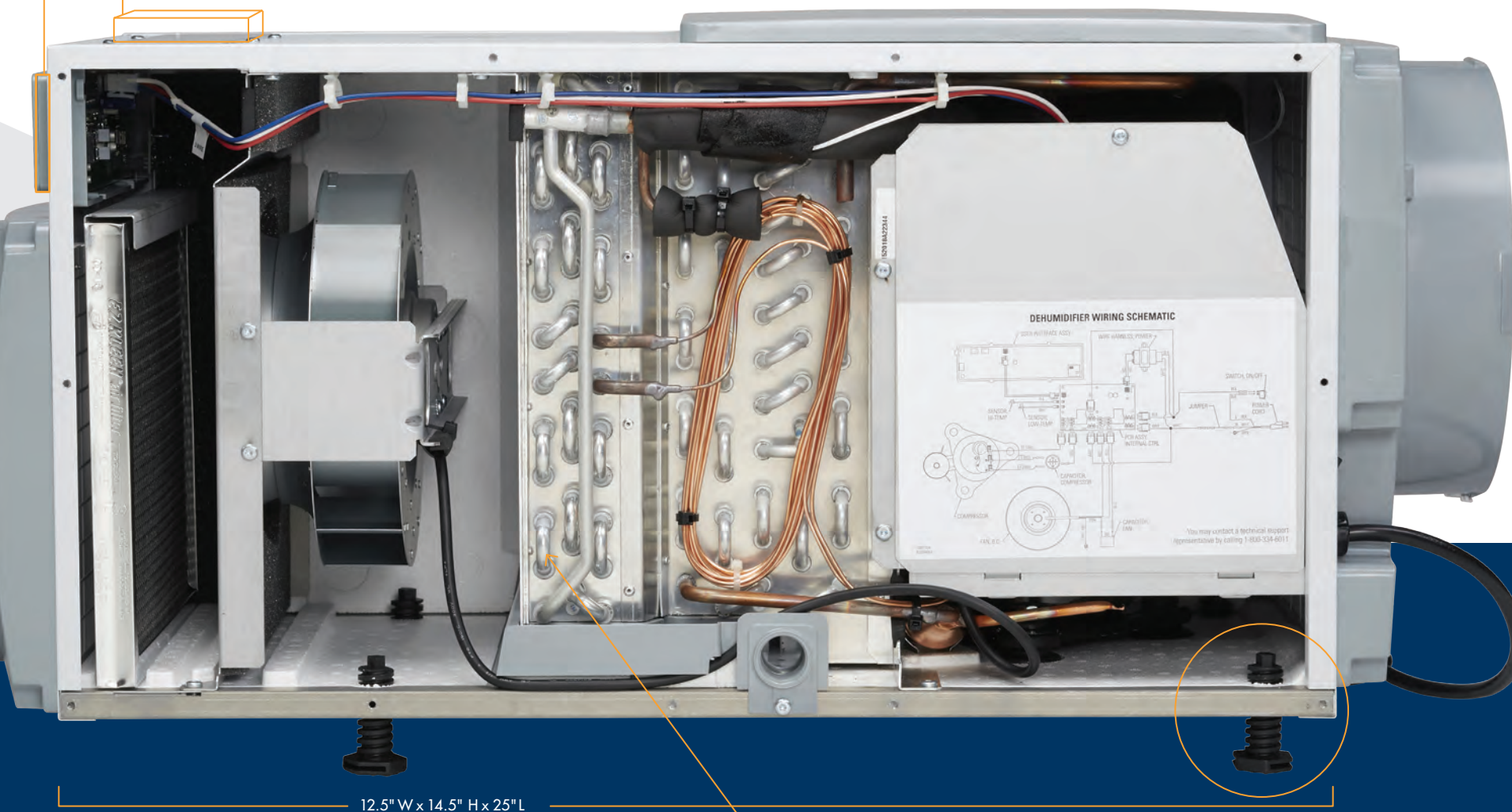
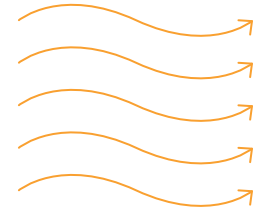
- + Intuitive consumer RH% set point
- + Top and side mounting options
- + Interactive display walks you through set up options, eliminating dip switches
- + Ventilation control options including ASHRAE 62.2-2010
- + Primary/secondary zoned dehumidification options
- + New setting to either activate or deactivate the unit while the air conditioner is running
- + Troubleshooting assistance with easy to identify diagnostic codes on the display and on back of the control cover
- + Flexible control options in living space (see back cover)

World-Class Quality

- + **Aluminum coils** Protect against corrosion, extending the life of the refrigeration system
- + **Manufacturing process** End of line testing with helium leak detection
- + **Refrigeration design** Optimized for manufacturing, withstands severe shipping
- + **Warranty** 5-year warranty and industry leading claim processing

Positive Pressure Cabinet

- + Convertible top and side air discharge locations (Models 1830, 1850 & 1870)
- + Helps remove condensation
- + No P-trap needed



12.5" W x 14.5" H x 25" L

Model 1850 Shown

Small Cabinet, Larger Capacity

The Models 1830 and 1850 have maximum capacity with a reduced cabinet size that fits into crawl spaces, scuttle openings and HVAC closets

Corrosion Defense

Industry leading aluminum coil for complete corrosion defense

Adjustable Feet

New robust plastic feet are easy to adjust by hand, no tools necessary

Power Options

1. Plug the unit directly into an outlet
2. Hardwired options available

Aprilaire Dehumidifiers	Model No.	Unit Size ² Width x Height x Depth	Capacity ppd = Pints Per Day	Weight lbs.
	1830	12½" x 14½" x 25"	70 ppd	67
	1830W³			
	1850	12½" x 14½" x 27½"	95 ppd	70
	1850W³			
	1870¹	19½" x 18¾" x 30"	130 ppd	113
	1870W^{1,3}			114
	1872^{1,2}			



¹ 1870, 1870W, 1872 are recognized as ENERGY STAR® Most Efficient in 2020 ²1852 and 1872 are on casters ³1830W, 1850W and 1870W are hardwired units

DEHUMIDIFIER SIZING GUIDELINES



The recommended home floor area (ft²) that each listed dehumidifier can dehumidify, assuming 8 ft. ceilings. These are sizing guidelines only. The actual home size is dependent on the exact location of the home, the actual total ventilation rate, occupant living habits, moisture removal characteristics of the air conditioning system and the environmental conditions at which the occupants experience comfort.

	Model 1830/1830W		Model 1850/1850W/1852		Model 1870/1870W/1872	
	1.00 ACH	.50 ACH	1.00 ACH	.50 ACH	1.00 ACH	.50 ACH
Region A	2800 Ft ²	3800 Ft ²	3800 Ft ²	5200 Ft ²	5200 Ft ²	7200 Ft ²
Region B	2200 Ft ²	3400 Ft ²	3000 Ft ²	4700 Ft ²	3900 Ft ²	6500 Ft ²
Region C	1400 Ft ²	2000 Ft ²	1900 Ft ²	2800 Ft ²	2300 Ft ²	3600 Ft ²

ACH = Air Changes per Hour. The tighter the house, the lower the ACH.

Control from Your Living Space



Model 76 Wall Mount Dehumidifier Control

- On, Off buttons
- Wall-mounted living space control
- Displays RH and controls to an RH value
- Remote control for crawl space applications and sealed attics



Model 8620/8620W with IAQ Control

- Universal 2H/2C or 4H/2C HP
- Event-Based™ Air Cleaning
- Humidity or Ventilation
- Touch screen
- Wi-Fi (8620W only)



Model 8910/8910W with IAQ Control

- Universal 3H/3C or 4H/2C HP
- Event-Based™ Air Cleaning
- Humidity and Ventilation
- 2-Part/3-Wire design
- Touch screen
- Wi-Fi (8910W only)



Model 8920W with IAQ Control

- Universal 3H/3C or 4H/2C HP
- Event-Based™ Air Cleaning
- Humidity and Ventilation
- 2-Part/3-Wire design
- Full-color touch screen
- Wi-Fi

Expect more from your partner

Aprilaire is dedicated to an unmatched industry quality standard. All of our new units include features engineered to provide maximum control—in application options and air quality performance. Our units are designed to be unobtrusive additions to living environments—small and quiet. Setup is streamlined and intuitive for both the contractor and home owner. **Control how, when and where you want fresh air with Aprilaire.**