

# **Dry Air Solutions**

**Whole-Home Humidifiers** 



### HOUSEHOLD PROBLEM:

Dry air makes you more susceptible to airborne viruses and saps your body's moisture leading to an increase in respiratory infections and itchy skin.



# Is the air in your home under control?

Dry air can be a problem in almost any home, but it is most common in semi-arid climates and those that require forced-air heating during the cooler months of the year.

During the winter months, the combination of cool, outdoor air and forced furnace heat can cause your home to be drier than the Sahara Desert.

## Air that's not properly humidified has serious implications:

- Low relative humidity makes you more susceptible to catching a cold\* and flu viruses have been linked to speedier progression and transmission in dry air.\*\*
- The respiratory infections caused by cold and flu viruses are a leading trigger of asthma in children.†
- Static shock, dry skin, itchy eyes, and a sore throat can all be traced back to air that's not properly humidified.

Dry air can also cause structural damage to your home and possessions, the result of which can be costly. It can cause walls, woodwork, and hardwood floors to crack. And those annoying static shocks? They can cause irreparable damage to your electronic equipment.

There's also the impact dry air has on your energy bill. Dry air makes you feel colder at normal temperatures, causing you to overheat your home.

According to the Environmental Protection Agency, for every degree you heat your house, you add four percent to the cost of your energy bill.‡

Dry air is more than just an inconvenience, it's a threat to your family's health, comfort, and budget. Thankfully, with Aprilaire®, there's something you can do to control it.



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- **SOURCES:** \* PLOSone, High Humidity Leads to Loss of Infectious Influenza Virus from Simulated Coughs.
  - \*\* Department of Microbiology, Mount Sinai School of Medicine, Influenza Virus Transmission Is Dependent on Relative Humidity and Temperature; 2007, New York, New York, USA.
  - Asthma and Allergy Foundation of America, Asthma Overview.
  - <sup>1</sup> Environmental Protection Agency, Region 7, Home Helps,

# Healthy Air is within reach with Aprilaire.

While dry air can make your home both uncomfortable and unhealthy, there's no need for you and your family to suffer. Aprilaire whole-home humidifiers can help. They are installed as part of your home's heating and cooling system and automatically deliver the perfect amount of humidified air, throughout every room of your home.

### An Aprilaire Whole-Home Humidifier Can Help

#### **CONTROL HEALTH**

Maintaining an ideal humidity level between 40% and 60% throughout your home keeps your nasal passages and airways healthy and reduces incidence of cold and flu. According to Dr. Joseph Lubart in an article in the New York State Journal of Medicine, regulation of humidity "would appear to be the most important prevention measure" from cold virus infection during cold months when the home's furnace is running.

#### PROTECT YOUR HOME

You've invested a lot into your home—protect it. An Aprilaire humidifier can help keep your possessions safe from dry air. Furniture, hardwood floors, musical instruments, and electronics are better protected when your home is properly humidified.

### **INCREASE COMFORT AND ENERGY EFFICIENCY**

Optimal humidity also helps you stay warmer at cooler temperatures. That means you can lower your thermostat and save energy, thereby lowering your heating costs.



Your dealer will recommend the ideal model and placement for your home.



# Perfectly humidified air is within your control.

Aprilaire whole-home humidifiers come with many distinct advantages. One is that they are installed as part of your heating and cooling system.

That means they deliver the perfect amount of humidity throughout your entire home without multiple noisy, unsightly and difficult-to-maintain portable units.

Another advantage is that Aprilaire whole-home humidifiers deliver the perfect amount of humidity, 24 hours a day, seven days a week. They accurately measure the outdoor temperature and indoor humidity levels to provide the ideal amount of indoor relative humidity.

## **Automatic digital control**

The Aprilaire Automatic Digital Control mounts on your heating system and features Auto-Trac® to automatically deliver the optimal amount of humidity. It features a convenient display and indicators for relative humidity levels, operation status, and service needs. For more precise humidity control and preservation, we suggest the wall-mounted digital display humidistat.

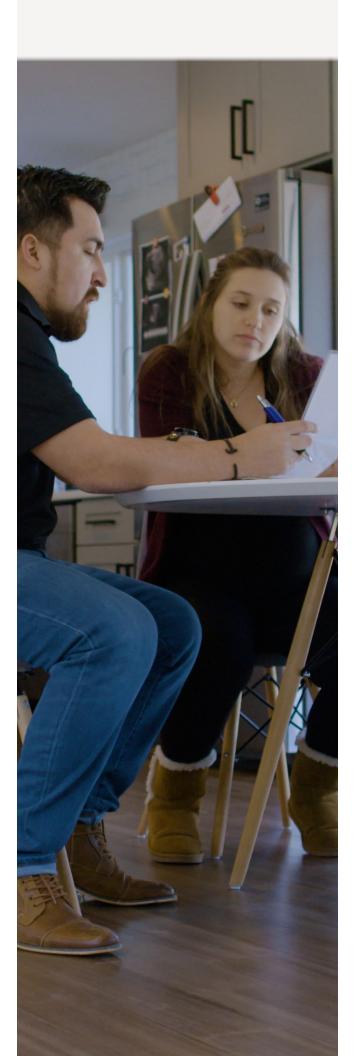
## Wi-Fi control of Indoor Air Quality

Aprilaire Wi-Fi thermostats with IAQ control provide the most convenient and accurate control of humidity and temperature. The thermostat works with the Auto-Trac® feature to automatically deliver optimal humidity. Automatic humidity control is integrated into the thermostat and you can easily control temperature and humidity levels from anywhere with the app on your mobile device. The app also allows you to control other installed Aprilaire IAQ products for optimal fresh air ventilation and air purity and keeps you up-to-date about changing climate conditions in your home.





Aprilaire offers a full line of Wi-Fi thermostats for convenient, efficient control of temperature, humidity, and all Indoor Air Quality accessories.



# Professionally trained Aprilaire contractors deliver healthy home solutions.

Aprilaire is the Indoor Air Quality leader in whole-home humidification solutions. In 1954, we introduced the very first effective whole-home residential humidification system.

Since then, Aprilaire humidifiers have been often imitated, but never duplicated. Our revolutionary technology and innovative solutions continue to set the standard for precision whole-home humidification.

### Performance and peace of mind

Our humidification solutions are engineered and manufactured in the United States.

Once installed by your local heating and cooling specialist, they require little maintenance or attention.

The leaders in Healthy Air Solutions since 1954.

# A humidification solution for every home.

Your Aprilaire dealer will recommend which one is right for you.

Humidifiers		Type of Humidification	<b>Unit Size</b> Width x Height x Depth	Plenum Opening	Capacity GPD = Gallons Per Day	Electrical Data	Water Panel/ Canister
800 SERIES	#800 <sup>++</sup> #801***	Steam For applications when evaporative units are less practical (attics, crawl spaces, closets, milder winter climates, non-forced-air heating source).	10½" x 20½" x 7½"	-	11.5 GPD 16.0 GPD 20.5 GPD	120V 60Hz 11.5 AMP 120V 60Hz 16 AMP 208V 60Hz 11.5 AMP	80#
	#865 866***	Ductless Steam Includes the Model 800, Fan Pack, Model 65 Control and Model 4028 Drain Trap. For homes without forced-air heating systems.	Fan Pack: 14"x 62%;2"x 315%6"  Finished Grille: 163%6" x 9" x 13/32"	-	30.0 GPD 23.3 GPD 34.6 GPD	208V 60Hz 16 AMP 240V 60Hz 11.5 AMP 240V 60Hz 16 AMP	
700 SERIES	#700* #700M**	Fan Powered Evaporative Built-in fan that pulls heated air directly from the furnace.	15 <sup>29</sup> / <sub>32</sub> " x 18" x 10 <sup>11</sup> / <sub>32</sub> "	W: 14 <sup>3</sup> / <sub>4</sub> " H: 14 <sup>5</sup> / <sub>16</sub> "	18 GPD	120V 60Hz 0.8 AMP	35
600 SERIES	#600* #600M**	Large Bypass Evaporative Uses the furnace blower to move air through a Water Panel®	15%" x 15¾" x 10¼" 6" dia. round opening	W: 10" H: 12 <sup>3</sup> / <sub>4</sub> "	17 GPD	24V 60Hz 0.5 AMP	35
500 SERIES	#500* #500M**	Small Bypass Evaporative Designed for smaller homes.	15%" x 13" x 10¾" 6" dia. round opening	W: 9½" H: 9½"	12 GPD	24V 60Hz 0.5 AMP	10
400 SERIES	#400* #400M**	Water Saver Bypass Evaporative Uses 100% of water and evaporative technology that eliminates the need for a drain. Conserves Water.	15¾" x 15¾" x 10¾"* 6" dia. round opening See note on heat pumps†	W: 10" H: 12 <sup>3</sup> / <sub>4</sub> "	17 GPD	24V 60Hz 0.5 AMP	45
300 SERIES	#300 #300	Self-Contained Evaporative For boilers, mini-splits, radiant heat and ductless systems.	14¾" x 12½" x 22¾ <sub>52</sub>	-	13 GPD	120V 60Hz 0.7 AMP	35





HUMIDIFIER SIZING GUIDELINES GPD Needed Per Square Foot** Based on Building Structure Tightness											
	VOLUME OF BUILDING (FT <sup>3</sup> )										
Stavetina Tiebta ee	8000	12000	16000	20000	24000	32000	40000				
Structure Tightness	BUILDING FLOOR AREA (FT²) WITH 8 FT CEILINGS										
	1000 Ft <sup>2</sup>	1500 Ft <sup>2</sup>	2000 Ft <sup>2</sup>	2500 Ft <sup>2</sup>	3000 Ft <sup>2</sup>	4000 Ft <sup>2</sup>	5000 Ft <sup>2</sup>				
Tight	3.3 GPD	5.0 GPD	6.7 GPD	8.3 GPD	10.0 GPD	13.4 GPD	16.7 GPD				
Average	6.7 GPD	10.0 GPD	13.4 GPD	16.7 GPD	20.0 GPD	26.7 GPD	33.4 GPD				
Loose	10.0 GPD	15.0 GPD	20.0 GPD	25.0 GPD	30.1 GPD	40.1 GPD	50.1 GPD				

 $<sup>\</sup>hbox{*Automatic Digital Control (shown)}$ 

\*\*Model 800LC available with 80LC canister for less conductive water 75-300µS/cm and 120VAC applications.
‡AHRI Air Conditioning, Heating, and Refrigeration Institute GPD = Gallons Per Day Guideline F

A family of 4 will add 2 gallons of humidity per day through everyday activities like breathing, cooking, bathing and washing. Evaporative capacities assume blower is active 100% of the time, plenum temperature is at 120°F and water is cold.

Bypass Humidifiers - Can be installed on the supply or return plenum.

 $\label{eq:water-usage-Rate-Model} \textbf{300} is 6 gph (gph=gallons per hour); Models 500, 600 and 700 are 3 gph; Model 400 is 0.7 gph; Model 800 is 0.6 to 1.8 gph depending on voltage, amp draw and water quality.$ 

<sup>\*\*</sup>Manual Control – For those rare occurrences where an automatic control is not practical, Aprilaire offers the same great humidifiers with a mechanical control.

<sup>\*\*\*801 &</sup>amp; 866 Modulating Steam Humidifier - For precise RH control. Controls are sold separately.

\*Heat Pumps - Model 400 can be installed in heat pump applications. However, due to the fact that heat pumps deliver lower temperature air to the home than gas furnaces, evaporation will be approximately 60% of rated capacity. (With other Aprilaire models, hot water can be used instead of cold to maximize evaporation. However, due to the nature of the wicking water panel in the Model 400, hot water provides less benefit). As such, your dealer will need to take the size and age of your home into consideration to ensure the Model 400 will provide satisfactory comfort and protection through adequate humidification.

### HEALTH | COMFORT | PRESERVATION | ENERGY SAVINGS

# Delivering Healthy Air solutions to homes since 1954.

To homeowners who do more for their families,
Aprilaire is your trusted source for total Indoor Air
Quality solutions that can help improve your family's
health, make your home more comfortable and
energy efficient while protecting your home assets.

For more information about the Aprilaire family of Healthy Air solutions, visit aprilaire.com.



#### **HEALTHY AIR SOLUTIONS**

- Fresh Air Ventilation
- Air Purification
- Humidity Control
- Temperature Control

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