



# All Product Guide

Quick Reference | May 2023



Healthy Air in every home.



# AprilAire

We are professional-grade Healthy Air solutions. AprilAire is on a mission to enhance people's health by improving the air in their homes. Healthy Air is essential to living a healthy lifestyle and improving our overall well-being. We are inspired by the needs of consumers and the expertise of professional contractors to create, design, and build innovative solutions.

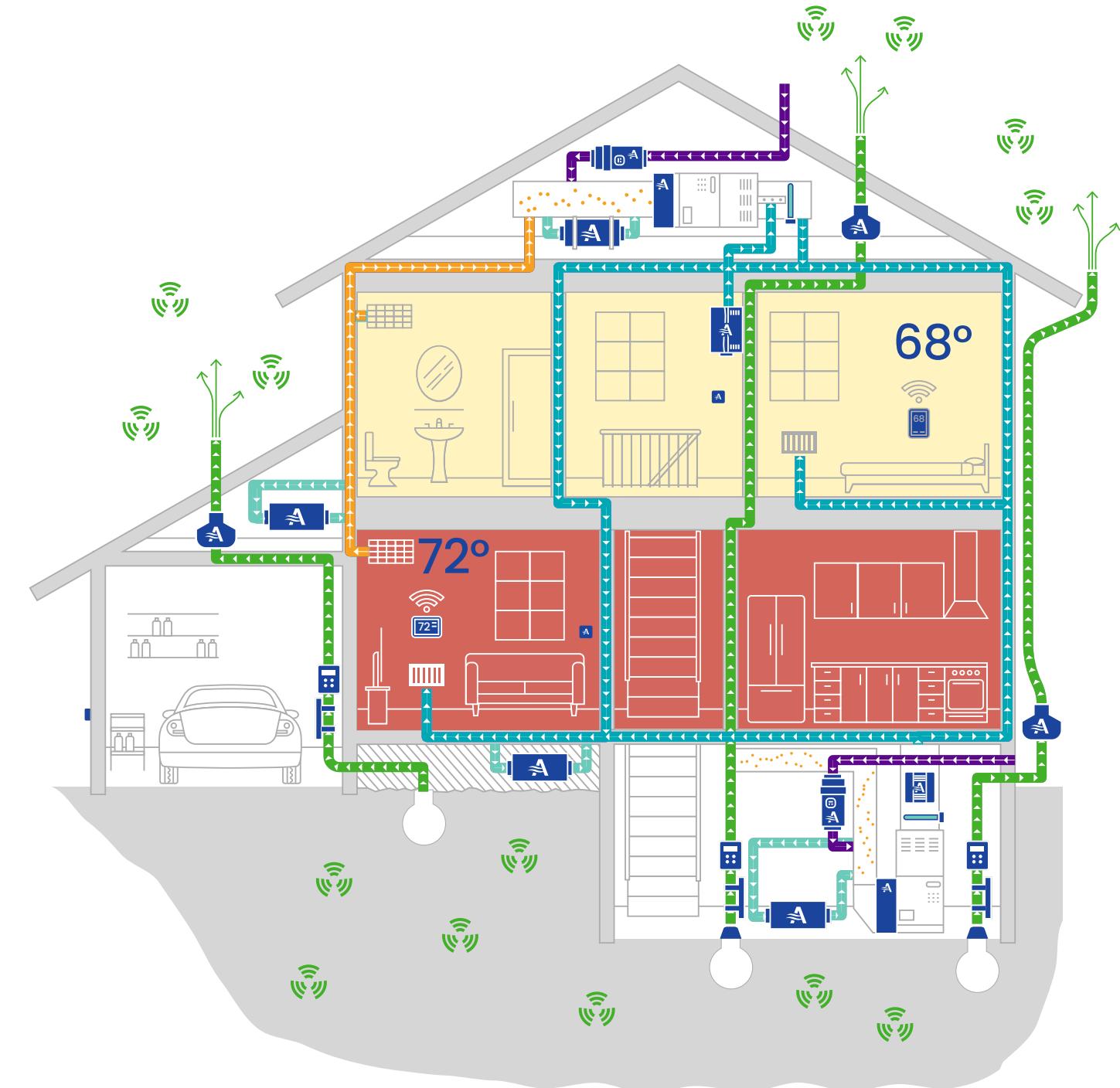
**AprilAire is Healthy Air.**



5-year warranty on all installed products



## AprilAire Healthy Air Solutions



- Radon Mitigation
- Fresh Air Ventilation
- Air Filtration
- Humidification
- UVC

- Dehumidification
- Zone Control



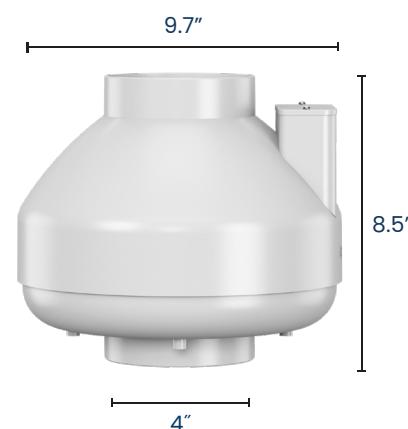
# Mitigation Fans

AprilAire Radon Mitigation Fans are specifically designed for radon mitigation. AprilAire Fans provide superb performance and run ultra-quiet.

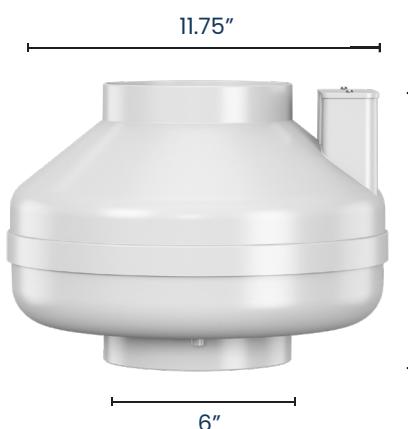
## Features

- Energy efficient
- Ultra-quiet operation
- Meets all electrical code requirements
- Housing that stays white
- Water-hardened motorized impeller
- Seams sealed to inhibit radon leakage (ARN15F/ARN25F double snap sealed)
- ETL Listed – for indoor or outdoor use
- Thermally protected motor
- Rated for commercial and residential use
- Patent pending design
- Optimal for moderate to tight soils (ARNHPF Only)
- Technology to inhibit radon and soil gas leakage
- ETL listed by Intertek to UL507 and CSA C22.2 Standards

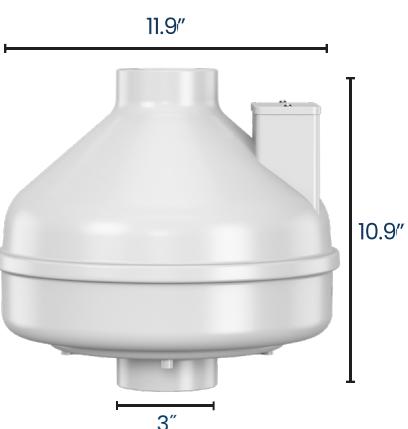
**ARN15F**



**ARN25F**



**ARNHPF**



MODEL	FAN DUCT DIAMETER	WATTS	RECOMMENDED MAXIMUM OPERATING PRESSURE " WC	TYPICAL CFM vs. STATIC PRESSURE WC											
				0"	0.2"	0.5"	1.0"	1.5"	2.0"	2.5"	3.0"	3.5"	4.0"		
ARN15F	4"	41-72	1.7	166	-	126	82	41	3	-	-	-	-		
ARN25F	6"	70-170	2.3	375	340	282	204	140	70	-	-	-	-		
ARNHPF	3"	70-170	4.0	-	110	-	97	88	79	68	54	36	14		

Designed &  
Assembled  
in the USA  
utilizing U.S. and Global Components



ETL Listed



All AprilAire Radon Mitigation Fans are covered by our 5-year, hassle-free warranty.



# Mitigation Kits

Kits include: fan, manometer, couplings, and radon system alarm.



	<b>ARN15K</b>	<b>ARN25K</b>	<b>ARNHPK</b>
<b>Application</b>	Slab size <1500 sq. ft.	Slab size 1500-2500 sq. ft.	Moderate to Tight Soil
<b>RRNC 2.0 Radon Fan Type</b>	RF1, RF2	-	-
<b>Dimensions DxH</b>	9.7" x 8.5"	11.75" x 8.6"	11.9" x 10.9"
<b>Color</b>	White	White	White
<b>Fan Duct Diameter</b>	4"	6"	3"
<b>Pressure</b>	1.7" WC	2.3" WC	4.0" WC

## Radon Accessories

ACCESSORY	DESCRIPTION
	<b>Manometer P/N ARN05M</b> Mounts to the outside of PVC pipe on a radon mitigation system and measures vacuum pressure in real time, helping to indicate potential issues with the fan. It can serve as a secondary indicator that vacuum pressure has changed in the event of a system alarm going off, helping to confirm that it's not a false alarm.
	<b>Transition Fitting P/N ARNTF4</b> Consolidates the number of fittings needed in outdoor radon mitigation system installations. Connects a 4" fan pipe to a 4" exhaust pipe with a weir (not included) for capturing and draining condensate. Weir is included in the Condensate Bypass Kit.
	<b>Condensate Bypass Kit P/N ARNCBK</b> This kit is designed to drain condensation around the fan in outdoor installs.
	<b>Radon-T Fitting P/N ARNSIT</b> Designed for use in adding radon mitigation to new construction and crawl spaces. Provides 4-way airflow, allowing moisture and soil gases to be drawn from all angles.
	<b>System Alarm P/N ARNALM</b> Advanced vacuum monitoring device utilizing piezoresistive pressure sensor (PPS) technology. It provides homeowners with an easy-to-read, easy-to-use system alarm that requires no interpretation.



# Humidity Control

## Humidifiers—Part of the AprilAire Healthy Air System.

HUMIDIFIERS	TYPE OF HUMIDIFICATION	UNIT SIZE WIDTH X HEIGHT X DEPTH	PLENUM OPENING	CAPACITY GPD=GALLONS PER DAY	ELECTRICAL DATA	WATER PANEL/ CANISTER
#800* #801***	<b>Steam</b> For larger homes and applications when evaporative units are less practical (attics, crawl spaces, closets, milder winter climates, non-forced air-heating source).	10 1/8" x 20 7/8" x 7 1/8"	-	11.5 GPD  16.0 GPD  20.5 GPD  30.0 GPD  23.3 GPD  34.6 GPD	120 VAC 60Hz 11.5A  120 VAC 60Hz 16.0A  208 VAC 60Hz 11.5A  208 VAC 60Hz 16.0A  240 VAC 60Hz 11.5A  240 VAC 60Hz 16.0A	80††
#865** #866***	<b>Ductless Steam</b> 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 6 29/32" x 3 15/16" Finished Grille: 16 3/16" x 9" x 1 3/32"	-			
#700* #700M**	<b>Fan Powered Evaporative</b> Built-in fan that pulls heated air directly from the furnace.	15 29/32" x 18" x 10 11/32"	W: 14 3/4" H: 14 31/100"	18 GPD	120 VAC 60Hz 0.8A	35
#600* #600M**	<b>Large Bypass Evaporative</b> Uses the furnace blower to move air through a Water Panel®.	15 3/8" x 15 3/4" x 10 1/4" 6" dia. round opening	W: 10" H: 12 3/4"	17 GPD	24 VAC 60Hz 0.5A	35
#500* #500M**	<b>Small Bypass Evaporative</b> Designed for smaller homes	15 5/8" x 13" x 10 1/4" 6" dia. round opening	W: 9 1/2" H: 9 1/2"	12 GPD	24 VAC 60Hz 0.5A	10
#400* #400M**	<b>Water Saver Bypass Evaporative</b> Uses 100% of water and evaporative technology that eliminates the need for a drain. Conserves Water.	15 3/8" x 15 3/4" x 10 1/4" 6" dia. round opening See note on heat pumps†	W: 10" H: 12 3/4"	17 GPD	24 VAC 60Hz 0.5A	45
#300	<b>Self-Contained Evaporative</b> For boilers, mini-splits, radiant heat and ductless systems.	14 3/8" x 12 1/2" x 22 3/32"	-	13 GPD	120 VAC 60Hz 0.7A	35



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Assembled  
in the USA  
Using US and Global Components

### HUMIDIFIER SIZING GUIDELINES GPD NEEDED PER SQUARE FOOT† BASED ON BUILDING STRUCTURE TIGHTNESS

STRUCTURE TIGHTNESS	VOLUME OF BUILDING (FT <sup>3</sup> )						
	8000	12000	16000	20000	24000	32000	40000
	BUILDING FLOOR AREA (FT <sup>2</sup> ) WITH 8 FT CEILINGS						
Tight	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>
<b>Average</b>	3.3 GPD	5.0 GPD	6.7 GPD	8.3 GPD	10.0 GPD	13.4 GPD	16.7 GPD
<b>Average</b>	6.7 GPD	10.0 GPD	13.4 GPD	16.7 GPD	20.0 GPD	26.7 GPD	33.4 GPD
<b>Loose</b>	10.0 GPD	15.0 GPD	20.0 GPD	25.0 GPD	30.1 GPD	40.1 GPD	50.1 GPD

\* Automatic Digital Control (shown)

\*\* Manual Control - For those rare occurrences where an automatic control is not practical, AprilAire offers the same great humidifiers with a manual control.

\*\*\* 801 & 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 Model 400, hot water provides less benefits). 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.

†† Model 800LC available with 80LC canister for less conductive water 75-300µS/cm and 120VAC applications.

‡ GPD = Gallons Per Day, as recommended by AHRI (Air Conditioning, Heating and Refrigeration Institute), 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.

Water Usage Rate - Model 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.

## Regional Humidifier Applications

AprilAire humidifiers can be installed on many different types of HVAC equipment. This application guide is to assist in the selection of the appropriate AprilAire product based upon geography and heating equipment.

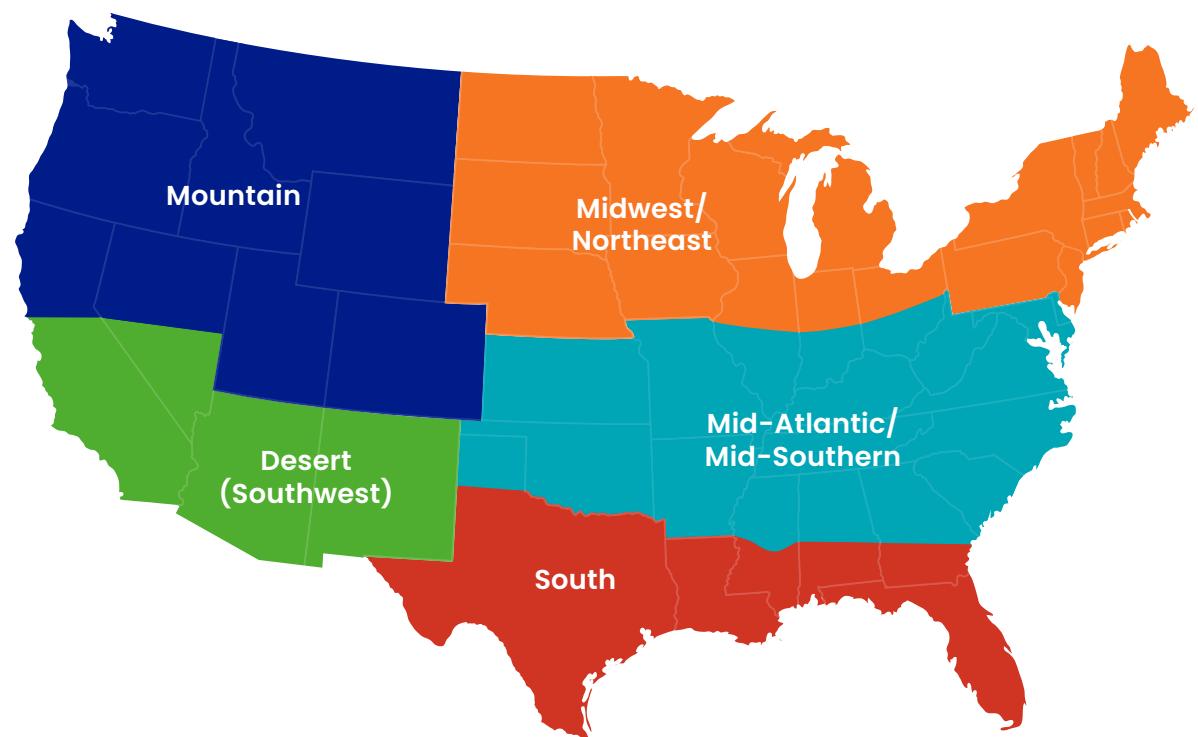
It's important to consider the plenum temperature, air flow (fan speed) and run time (heat call primary, fan only call secondary) when selecting products.

Automatic humidity controls have an integrated blower

activation feature, which is factory set to 'ON'. It will turn on the humidifier and the HVAC blower for humidification without a heat call. It will increase the run time and effectiveness of the humidifier.

Installations with a manual humidifier control can increase capacity by turning the thermostat fan to "ON".

When installing evaporative humidifiers, it's recommended they are plumbed to hot water.



### CLIMATE ZONE/RECOMMENDED APRILAIRE HUMIDIFIER SOLUTION BY MODEL

EQUIPMENT	MIDWEST/ NORTHEAST	MID-ATLANTIC/ MID-SOUTHERN	MOUNTAIN	SOUTH	DESERT (SOUTHWEST)
Gas/Oil Furnace-Single Stage or Multi Stage*	400/500/600/700/800	400/500/600/700/800	400/500/600/700/800	500/600/700/800	800
Gas/Oil Modulating Furnace**	700/800	700/800	700/800	700/800	800
Heat Pump/Geo-Single Stage or Multi Stage*	400†/500/600/700/800	400†/500/600/700/800	400†/500/600/700/800	500/600/700/800	800
Heat Pump/Geo-Modulating**	700/800	700/800	700/800	700/800	800
Boiler With AHU (No Heat Source)	800	800	800	800	800
Boiler With AHU and Hot Water Coil/ Hydro Air Unit	700/800	700/800	800	800	800
Boiler	300/865	300/865	300/865	300/865	300/865
Electric Baseboard Heating	300/865	300/865	300/865	300/865	300/865
Humidifying with A/C Unit	800	800	800	800	800

\*PSC, constant torque ECM

\*\*Variable speed ECM

†Evaporative performance of bypass humidifiers decreases with lower airflow volume and lower air temperature. Bypass models can be used in these applications if the HVAC system pressure differential between supply and return ducts is at least 0.08 in. wg and air temperature, hot water and continuous fan in the supply duct is at least 100°F.



# Humidity Control

Dehumidifiers – Part of the AprilAire Healthy Air System



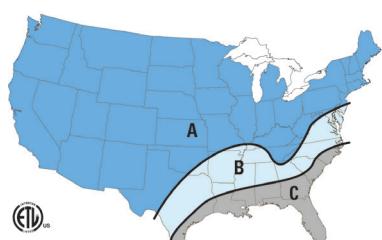
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DEHUMIDIFIERS	UNIT SIZE <sup>2</sup>		CAPACITY PPD = PINTS PER DAY	AIRFLOW @ VARYING E.S.P. (EXTERNAL STATIC PRESSURE - DRY COIL)		UNIT WEIGHT LBS.	
	WIDTH X HEIGHT X LENGTH			0.0" w.c.	200 CFM		
Intertek #E070	12½" x 12½" x 25"		@80°F/60%RH @73°F/60%RH	70 ppd 53 ppd	0.2" w.c. 0.4" w.c.	170 CFM 140 CFM	56
Intertek #E080 #E080H <sup>1</sup>	14" x 15" x 26"		@80°F/60%RH @73°F/60%RH	80 ppd 65 ppd	0.0" w.c. 0.2" w.c. 0.4" w.c.	185 CFM 135 CFM 85 CFM	63
Intertek #E100 #E100H <sup>1</sup> #E100C <sup>2</sup>	14" x 15" x 26"		@80°F/60%RH @73°F/60%RH	100 ppd 85 ppd	0.0" w.c. 0.2" w.c. 0.4" w.c.	280 CFM 245 CFM 210 CFM	64
Intertek #E130 #E130H <sup>1</sup> #E130C <sup>2</sup>	19½" x 18¾" x 30"		@80°F/60%RH @73°F/60%RH	130 ppd 105 ppd	0.0" w.c. 0.2" w.c. 0.4" w.c.	310 CFM 270 CFM 225 CFM	98

<sup>1</sup>E080H, E100H and E130H are hardwired units <sup>2</sup>E100C and E130C are on casters

## DEHUMIDIFIER SIZING GUIDELINES



The recommended home floor area (ft<sup>2</sup>) that each listed dehumidifier can dehumidify is to be used as 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. Values are for the most humid locations within each region.

Provide on-demand sizing recommendations using the Dehumidifier Selection Assistant  
[AprilAirepartners.com/dsa](http://AprilAirepartners.com/dsa)

	MODEL E080		MODEL E100		MODEL E130	
	LOOSE	TIGHT	LOOSE	TIGHT	LOOSE	TIGHT
REGION A	3,200 Ft <sup>2</sup>	4,400 Ft <sup>2</sup>	4,000 Ft <sup>2</sup>	5,500 Ft <sup>2</sup>	5,200 Ft <sup>2</sup>	7,200 Ft <sup>2</sup>
REGION B	2,600 Ft <sup>2</sup>	3,900 Ft <sup>2</sup>	3,200 Ft <sup>2</sup>	5,000 Ft <sup>2</sup>	3,900 Ft <sup>2</sup>	6,500 Ft <sup>2</sup>
REGION C	1,600 Ft <sup>2</sup>	2,300 Ft <sup>2</sup>	2,000 Ft <sup>2</sup>	3,000 Ft <sup>2</sup>	2,300 Ft <sup>2</sup>	3,600 Ft <sup>2</sup>



# Air Filtration

Air Cleaners – Part of the AprilAire Healthy Air System



Designed &  
Assembled  
in the USA

utilizing U.S. and Global Components

AIR CLEANERS	NOMINAL SIZE (IN INCHES)	CABINET SIZE	SHIPPING WEIGHT (LBS)	INCLUDED FILTER	COMPATIBLE FILTERS*
	#2216	20 x 25	W: 6 ¾" H: 22 ⅓" D: 27 ⅜"	20	MERV 16
	#2416	16 x 25	W: 6 ¾" H: 17 ¾" D: 30 ⅓"	19.25	416
	#2516	31 x 28	W: 6 ¾" H: 31" D: 30 ⅓"	24.9	516
	#2210	20 x 25	W: 6 ¾" H: 22 ⅓" D: 27 ⅜"	19	MERV 13
	#2310	20 x 20	W: 6 ¾" H: 20 ⅔" D: 22 ⅓"	17	313
	#2410	16 x 25	W: 6 ¾" H: 17 ¾" D: 30 ⅓"	19	413
	#1110	16 x 20	W: 6 ¾" H: 17 ¾" D: 22 ⅓"	13	MERV 11
	#1210	20 x 25	W: 6 ¾" H: 22 ⅓" D: 27 ⅜"	20	210
	#1310	20 x 20	W: 6 ¾" H: 20 ⅔" D: 22 ⅓"	15	313
	#1410	16 x 25	W: 6 ¾" H: 17 ¾" D: 30 ⅓"	19	410
	#1510	31 x 28	W: 6 ¾" H: 31" D: 30 ⅓"	28	510
	#1610	25 x 20	W: 6 ¾" H: 25 ⅓" D: 22 ⅓"	18	910
	#1620	16 x 25	W: 15 ⅛" H: 17 ⅓" D: 30 ⅓"	31	410
	#5000	20 x 25	W: 15 ⅛" H: 22 ⅓" D: 27 ⅓"	32.4	210
		16 x 25	W: 12" H (front): 18 ⅓" H (back): 17 ¾" D: 31"	35	501

\*Included filter is always available as a replacement.



# Air Sanitization

UVC – Part of the AprilAire Healthy Air System



MODEL #	CONTAINS	AIR CLEANER SIZE (H X L X W)	INCLUDED FILTER
	AUV24V	UVC Coil Cleaner	MERV 11
	AUVRPB		
	UV12	1210 Air Cleaner AUV24V UV-C Coil Cleaner	20" x 25" x 4" 210 MERV 11
	UV14	1410 Air Cleaner AUV24V UV-C Coil Cleaner	16" x 25" x 4" 410 MERV 11
	UV22	2210 Air Cleaner AUV24V UV-C Coil Cleaner	20" x 25" x 4" 213 MERV 13
	UV24	2410 Air Cleaner AUV24V UV-C Coil Cleaner	16" x 25" x 4" 413 MERV 13



# Air Filtration

Air Filters – Part of the AprilAire Healthy Air System

Filter No.		Static Pressures at Variable CFM (in. w.c.)*														
		200	400	600	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000
MERV 16 Healthy Air 16	216		0.06	0.09	0.13	0.17	0.23	0.29	0.36							
	416		0.07	0.10	0.13	0.18	0.24	0.31								
	516		0.04	0.05	0.07	0.09	0.10	0.13	0.15	0.18	0.21	0.24	0.27	0.31		
	113	0.03	0.07	0.11	0.16	0.22	0.29									
	213	0.02	0.04	0.06	0.09	0.12	0.15	0.19	0.23	0.27	0.31					
	313	0.03	0.05	0.09	0.13	0.17	0.23									
	413	0.02	0.05	0.07	0.10	0.14	0.17	0.22	0.26	0.31	0.37					
MERV 13 Healthy Air 13	513	0.01	0.02	0.04	0.05	0.05	0.07	0.08	0.10	0.11	0.13	0.15	0.17	0.18	0.20	0.23
	613	0.02	0.05	0.07	0.10	0.14	0.17	0.22	0.26	0.31	0.37					
	813	0.02	0.04	0.06	0.09	0.12	0.15	0.19	0.23	0.27	0.31					
	913		0.04	0.07	0.10	0.13	0.17	0.22	0.25	0.30	0.35					
	213CBN		0.04	0.07	0.10	0.13	0.17	0.21	0.25	0.30	0.35					
	413CBN		0.04	0.07	0.10	0.14	0.19	0.24	0.29	0.36	0.43					
	513CBN		0.03	0.04	0.05	0.07	0.08	0.10	0.12	0.15	0.17	0.20	0.22	0.25	0.29	0.32
MERV 11 Healthy Air 11	110	0.02	0.05	0.06	0.10	0.14	0.20									
	210	0.02	0.03	0.04	0.06	0.08	0.11	0.13	0.16	0.19	0.22					
	310	0.02	0.04	0.06	0.10	0.14	0.19									
	410	0.02	0.03	0.05	0.07	0.09	0.12	0.15	0.19	0.22	0.27					
	510	0.02	0.02	0.03	0.04	0.04	0.05	0.06	0.07	0.09	0.10	0.12	0.14	0.15	0.17	0.19
	610	0.02	0.03	0.05	0.07	0.09	0.12	0.15	0.19	0.22	0.27					
	810	0.02	0.03	0.04	0.06	0.08	0.11	0.13	0.16	0.19	0.22					
MERV 10	910	-	0.03	0.05	0.07	0.09	0.12	0.15	0.18	0.22	0.27					
EAC	201	0.02	0.04	0.05	0.08	0.10	0.12	0.15	0.18	0.21	0.25					
EAC	401	0.02	0.04	0.05	0.08	0.10	0.14	0.17	0.21	0.25	0.29					
EAC	501	0.02	0.04	0.05	0.08	0.10	0.14	0.17	0.21	0.25	0.29					

\*Highest value shown is maximum recommended airflow capacity.



# Air Filtration

Air Filters – Part of the AprilAire Healthy Air System (Up to 12 Months)

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Removal Efficiency (Based on Particle Size)				
	0.3–1.0 Microns	1.0–3.0 Microns	3.0–10.0 Microns	
MERV 16	95%	98%	99%	
MERV 13	63%	88%	93%	
MERV 11	37%	67%	92%	
MERV 10	22%	56%	92%	
EAC – 5000	89%	95%	98%	

Test Method – MERV 10–16 – ASHRAE 52.2-2012, EAP – AHRI 680-2009

Upgrade Kits		Nominal Size (in inches)	Compatible With	Included Filter	Rails Model Number	Static Pressure Drop (in. w.c.) @ 1200 CFM	Maximum Airflow Capacity (in CFM)
MERV 13	#1213	20 x 25	AprilAire or Space-Gard 2200	213	4893	0.15	2000
	#1413	16 x 25	AprilAire or Space-Gard 2400	413	4894	0.17	2000

Upgrade Rails		Nominal Size (in inches)	Compatible With	Uses Filter Model	Maximum Airflow Capacity (in CFM)
	#4893	20x25	AprilAire or Space-Gard 2200	210, 213, 213CBN	2000
	#4894	16x25	AprilAire or Space-Gard 2400	410, 413, 413CBN	2000
#4897		16x25	16x25 Competitive Cabinets	610, 613	2000
	20x25	20x25 Competitive Cabinets	810, 813	2000	
#4898	16x20	16x20 Competitive Cabinets	110, 113	1200	
	20x20	20x20 Competitive Cabinets	310, 313	1200	

Replacement Filters					
Filter No.	Used with AprilAire Air Cleaner Models	Nominal Size (in inches)	Static Pressure Drop (in. w.c.) @ 1200 CFM	Maximum Airflow Capacity (in CFM)	
MERV 10	201	AprilAire or Space-Gard 2200**	20 x 25	0.12	2000
	401	AprilAire or Space-Gard 2400**	16 x 25	0.14	2000

\*\*Air Cleaner models no longer available.



# Healthy Air Controls

Thermostats - Part of the AprilAire Healthy Air System



Programmable and Non-Programmable    Programmable and Non-Programmable    Programmable and Non-Programmable    Programmable and Non-Programmable    Wi-Fi, Programmable and Non-Programmable    IAQ Control Equipment Control Module  
8 3/8" x 9 3/8" x 1 9/16"

RESIDENTIAL MODEL NUMBER STAGES	S84NIHC 1H/1C	S84NSU 1H/1C, 2H/1C	S86NMU 2H/2C, 4H/2C HP	S86NMUPR 2H/2C, 4H/2C HP	S86WMUPR ** 2H/2C, 4H/2C HP	8910 • 8910W** 3H/3C, 4H/2C HP	8920W** 3H/3C, 4H/2C HP
HOME AUTOMATION MODEL NO.	-	-	-	-	S86WMUPR	-	8840
Dimensions (W x H x D)	3.75" x 3.75" x 1.00"		4.38" x 4.38" x 0.8"		6" x 4.85" x 1.25"	7.1" x 4.85" x 1"	
Temperature Control	Easy to Read Display	●	●	●	●	●	●
	Simple Setup	●	●	●	●	●	●
	Displays Outdoor Temperature (if equipped)		●	●	●	●	●
	Adjustable Differential	●	●	●	●	●	●
	Progressive Recovery	●	●	●	●	●	●
	Heat Blast	●	●	●	●	●	●
Air Cleaning	Event-Based™ Air Cleaning		●	●	●	●	●
	Air Cleaning Notice		●	●	●	●	●
	Change Filter Alert	●	●	●	●	●	●
Humidifier Control	Automatic or Manual Humidifier Control			●	●	●	●
	"Humidifier On" Notice					●	●
	Displays Indoor RH			●	●	●	●
	Energizes HVAC Blower for Humidity			●	●	●	●
	Controls Humidifier with 24 VAC Dry Contact			●	●	●	●
Dehumidifier Control	Controls Whole-Home Dehumidifier			●	●	●	●
	Controls A/C Equipment for Dehumidification			●	●	●	●
	Senses and Displays Indoor RH		●	●	●	●	●
	"Dehumidifier On" Notice					●	●
	Energizes HVAC Blower for Dehumidification			●	●	●	●
	Controls Dehumidifier with 24 VAC Dry Contact			●	●	●	●
Ventilation Control	Programmable for Timed Ventilation			●	●	●	●
	Programmable for ASHRAE 62.2 Ventilation			●	●	●	●
	Configurable Temperature and Humidity Limits			●	●	●	●
	"Ventilation On" Notice					●	●
Product Configuration	Controls Air Cleaner and Humid or Dehumid or Vent			●	●		
	Controls Air Cleaner and Humid, Dehumid and Vent					●	●
	Wired Outdoor Temperature Sensor Included			●	●	●	●
	Two-Part Design—Only 3 Wires to the Living Space					●	●
	Compatible with Wireless Indoor and Outdoor Temperature/RH sensors				●		

\*\*Wi-Fi, compatible and compatible

# Wireless Sensors

Sensors for Model S86WMUPR only.

MODEL #	TYPE OF SENSOR	COMMUNICATIONS	WIRELESS RANGE	TEMPERATURE MEASUREMENT	HUMIDITY MEASUREMENT RANGE/ACCURACY:	BATTERY LIFE:	BATTERY TYPE:
#Z10IDT	Indoor Wireless Temperature and Humidity Sensor	2.4 GHz	35+ feet in typical application*	Accuracy: ±2°F (40°F to 105°F), ±5°F outside of this range	Accuracy: ±5% RH between 20% and 80% RH	1 year	Lithium CR2032 type
#Z10ODT	Outdoor Wireless Temperature and Humidity Sensor						

\*Actual distance varies dependent on number and type of interferences. Refer to signal strength for best results.

## FEATURES

- Get precise temperature control, reducing hot/cold spots, by averaging an installed thermostat with wireless indoor sensors.
- Temperature/event scheduling for specific areas of the house possible with wireless sensor installation (indoor sensor only)



## Zone Control Panels

MODEL	SPECIFICATIONS				
UNIVERSAL	<b>Overall Dimensions</b> 8 63/100" W x 14 18/25" H x 1 43/50" D <b>Humidity</b> 5%–90% RH, non-condensing <b>Operating Temperature</b> 32°F–158°F <b>Shipping Temperature</b> -40°F–180°F <b>Voltage</b> 18–30VAC 50/60 Hz				
<b>ZONED COMFORT CONTROL™ KITS** AVAILABLE: 6404K &amp; 6403K</b>					
HEAT PUMP ONLY	<b>Overall Dimensions</b> 8 63/100" W x 9 33/50" H x 1 43/50" D <b>Humidity</b> 5% – 90% RH, non-condensing <b>Operating Temperature</b> 32°F–158°F <b>Shipping Temperature</b> -40°F–180°F <b>Voltage</b> 18–30VAC 50/60 Hz				
<b>ZONED COMFORT CONTROL™ KITS** AVAILABLE: 6303K &amp; 6302K</b>					
CONVENTIONAL ONLY	<b>Overall Dimensions</b> 8 63/100" W x 9 33/50" H x 1 43/50" D <b>Humidity</b> 5%–90% RH, non-condensing <b>Operating Temperature</b> 32°F–158°F <b>Shipping Temperature</b> -40°F–180°F <b>Voltage</b> 18–30VAC 50/60 Hz				
<b>ZONED COMFORT CONTROL™ KITS** AVAILABLE: 6203K &amp; 6202K</b>					

\*\* Zoned Comfort Control Kits include: Zone panel, 6" duct probe and 24VAC 40VA universal transformer

## Zone Dampers



Designed &  
Assembled  
in the USA

### **utilizing U.S. and Global Components**

# Zone Dampers



Designed &  
Assembled  
in the USA

## utilizing U.S. and Global Components

**RECTANGULAR DAMPER SIZE & STOCK NO.\***

**NOMINAL WIDTH (IN INCHES)**

		RECTANGULAR DAMPER SIZE & STOCK NO.*												
		NOMINAL WIDTH (IN INCHES)												
		8"	10"	12"	14"	16"	18"	20"	22"	24"	26"	28"	30"	
<b>Side Mount</b> Motor mounted on short dimension W3 indicates power open/power closed		8" (203MM)	6721 6721W3	6722 6722W3	6723 6723W3	6724 6724W3	6725 6725W3	6726 6726W3	6727 6727W3	6728 6728W3	6729 6729W3	6730 6730W3	6731 6731W3	6753 6753W3
		10" (254MM)		6732 6732W3	6733 6733W3	6734 6734W3	6735 6735W3	6736 6736W3	6737 6737W3	6738 6738W3	6739 6739W3	6740 6740W3	6741 6741W3	6742 6742W3
		12" (305MM)			6743 6743W3	6744 6744W3	6745 6745W3	6746 6746W3	6747 6747W3	6748 6748W3	6749 6749W3	6750 6750W3	6751 6751W3	6752 6752W3
		14" (356MM)				6754 6754W3	6755 6755W3	6756 6756W3	6757 6757W3	6758 6758W3	6759 6759W3	6760 6760W3	6761 6761W3	6762 6762W3
		16" (406MM)					6763 6763W3	6764 6764W3	6765 6765W3	6766 6766W3	6767 6767W3	6768 6768W3	6769 6769W3	6770 6770W3
		18" (457MM)						6771 6771W3	6772 6772W3	6773 6773W3	6774 6774W3	6775 6775W3	6776 6776W3	6777 6777W3
		20" (508MM)							6778 6778W3	6779 6779W3	6780 6780W3	6781 6781W3	6782 6782W3	6783 6783W3
		22" (559MM)								6784 6784W3	6785 6785W3	6786 6786W3	6787 6787W3	6788 6788W3
		24" (610MM)									6789 6789W3	6790 6790W3	6791 6791W3	6792 6792W3
		26" (660MM)										6793 6793W3	6794 6794W3	6795 6795W3
<b>Bottom Mount</b> Motor mounted on long dimension		28" (711MM)										6796 6796W3	6797 6797W3	
		30" (762MM)											6798 6798W3	
		8" (203MM)	6721 6721W3	6812 6812W3	6813 6813W3	6814 6814W3	6815 6815W3	6816 6816W3	6817 6817W3	6818 6818W3	6819 6819W3			
		10" (254MM)		6732 6732W3	6823 6823W3	6824 6824W3	6825 6825W3	6826 6826W3	6827 6827W3	6828 6828W3	6829 6829W3			
		12" (305MM)			6743 6743W3	6834 6834W3	6835 6835W3	6836 6836W3	6837 6837W3	6838 6838W3	6839 6839W3			

\* Rectangular Damper Dimension = Nominal width + 3.5"

† 10 day lead time for shaded items

**ROUND DAMPER SIZE & STOCK NO.\***

	ROUND DAMPER SIZE & STOCK NO.* NOMINAL DIAMETER (IN INCHES)											
	4" (102MM)	5" (127MM)	6" (152MM)	7" (178MM)	8" (203MM)	9" (229MM)	10" (254MM)	12" (305MM)	14" (356MM)	16" (406MM)	18" (457MM)	20" (508MM)
 <b>Zone Damper</b> (Normally open/ power closed) W3 indicates power open/power closed			6606 6606W3	6607 6607W3	6608 6608W3	6609 6609W3	6610 6610W3	6612 6612W3	6614 6614W3	6616 6616W3	6618	6620
			H: 10 3/4"	H: 12 3/4"	H: 14 3/4"	H: 16 3/4"	H: 19 31/50"	H: 22"				
 <b>Ventilation Damper</b> (Normally closed/ power opened)			6506		6508		6510	6512				
			H: 10 3/4"		H: 10 3/4"		H: 10 3/4"	H: 12 3/4"				
 <b>Barometric Pressure Relief</b> (Air flow activated)					6108		6110	6112	6114	6116		
					H: 10 3/4"		H: 10 3/4"	H: 12 3/4"	H: 14 3/4"	H: 16 3/4"		
 <b>Static Pressure Relief</b> (Power activated)					6208		6210	6212	6214	6216	6218	6220
					H: 8"		H: 10"	H: 12"	H: 14"	H: 16"	H: 18"	H: 20"
 <b>Round Slip-In Damper</b> (Normally open/ power closed)	6704	6705	6706	6707	6708		6710					
	W: 3 4/5"	W: 3 4/5"	W: 3 4/5"	W: 3 4/5"	W: 3 4/5"		W: 3 4/5"					
	H: 12 3/5"	H: 12 3/5"	H: 12 3/5"	H: 12 3/5"	H: 12 3/5"		H: 12 3/5"					
	D: 7 3/10"	D: 8 3/10"	D: 9 3/10"	D: 10 3/10"	D: 11 3/10"		D: 13 3/10"					

\* Round Damper Dimension = Nominal diameter + 4.5"

† 10 day lead time for shaded items



# Fresh Air Ventilation

Ventilators and Ventilating Dehumidifiers –  
Part of the AprilAire Healthy Air System



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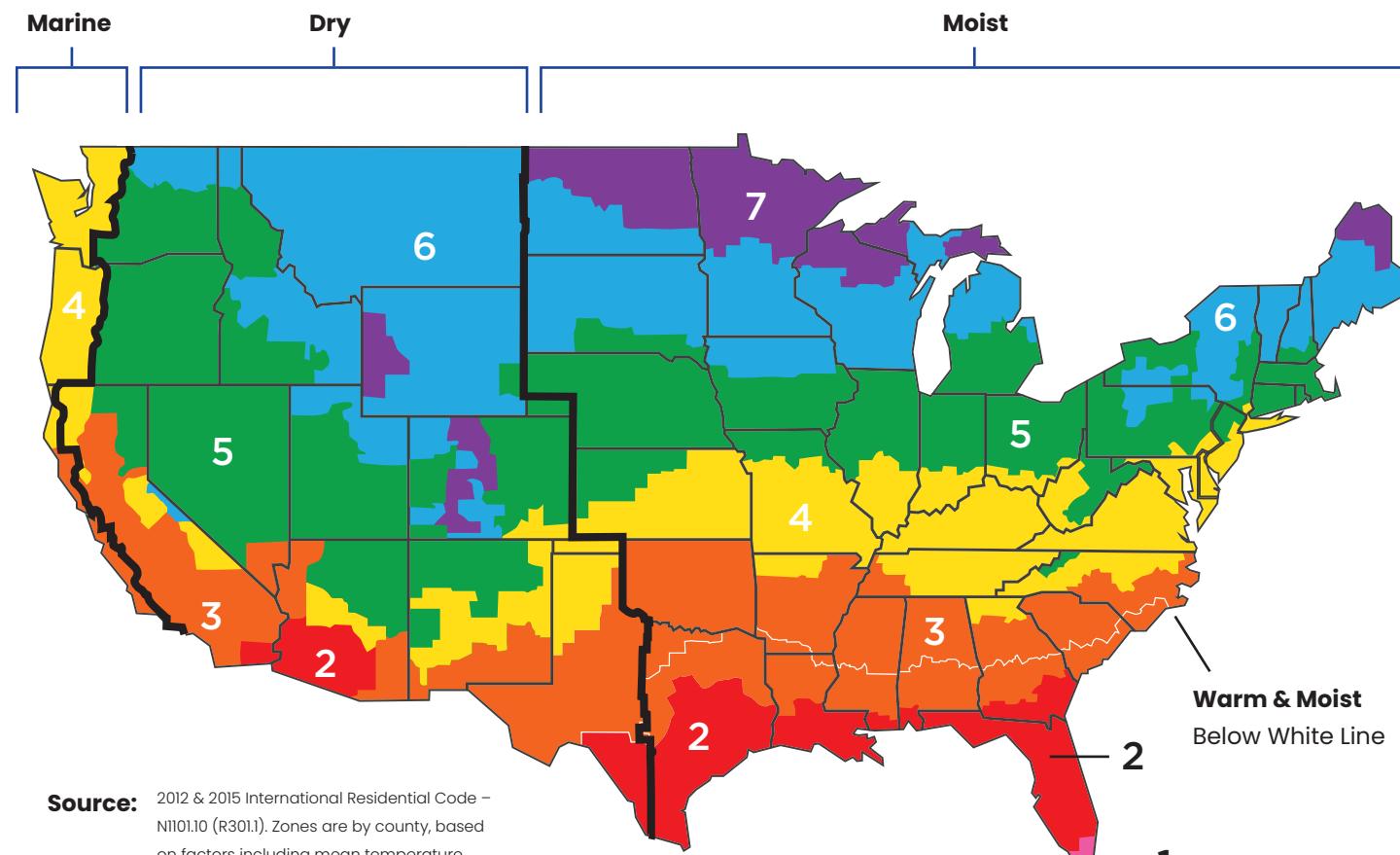
VENTILATION SYSTEMS	UNIT SIZE	SHIPPING WEIGHT LBS.	AIRFLOW 0.2 IN. W.C. @ (CFM)	DESCRIPTION
<b>VENTILATING DEHUMIDIFIERS</b>				
 <b>#E100V + 8190FF</b> <small>100 PPD*</small> <small>Most Efficient Residential Dehumidifier 2023</small>	W: 14 1/2" H: 23 1/2" L: 48 1/4"	82.00 (E100V)  16.80 (8190FF)	150	The Ventilating Dehumidifier (Models E100V + 8190FF) brings in fresh air to meet ventilation needs while removing excess humidity from the incoming outdoor air. Fresh air is brought in whenever the HVAC system or dehumidifier is running to meet that need. If the required time is not met through these run cycles, the ventilating dehumidifier will bring in fresh air and remove any excess humidity.
 <b>#8192A</b> <small>100 PPD*</small>	W: 15" H: 14" L: 26"	82.00	245	The 8192A features an integrated ventilation control. It draws fresh air into the home by energizing its fan and opening its vent damper. If the incoming air is above a set relative humidity percentage point, the outside air is dehumidified by the 8192A.  <b>*Dehumidification Capacity 100 Pints Per Day</b>
<b>FRESH AIR VENTILATORS</b>				
 <b>#8145A</b> <b>#8145NC</b> <b>#8145K</b> <small>Most Efficient Residential Ventilator 2023</small>	W: 12 1/4" H: 11 3/4" L: 23 2/5"	15.00 (8145A) 14.50 (8145NC) 21.00 (8145K)	210	The 8145A or 8142A delivers fresh air into the return or supply duct by energizing its fan and opening its integrated damper. Both models feature an 8120A ventilation controller integrated into the unit. NC models do not include an on-board controller so that ventilation can be controlled via thermostat. The 8145K comes with 8145NC, 8120A control, inlet hood and start collar for adding ventilation to existing homes and systems.
 <b>#8142A</b> <b>#8142NC</b>	W: 13 1/5" H: 6 7/10" L: 11 9/10"	11.50  10.75	210	
 <b>#8144NC</b> <small>Most Efficient Residential Ventilator 2023</small>	W: 10 1/4" H: 18 1/8" D: 10 1/4"	20.50	130	The 8144NC provides continuous low-volume ventilation for smaller single- and multi-family homes. A separate 8120A ventilation controller can be added to set the unit to operate by the controller's Code or Comfort functions.
<b>VENTILATION CONTROLLER</b>				
 <b>#8120A</b>	W: 4 11/100" H: 3 3/5" D: 1 59/100"	.50		The 8120A engages a fan or damper on ventilation solutions to deliver fresh air to return duct. It can provide fresh air within set high/low outdoor temperature and indoor RH limits.
<b>VENTILATION SYSTEM</b>				
 <b>#8126A</b>	W: 10 8/25" H: 10 3/4" D: 6"	6.50		The 8126A includes a powered damper, ventilation controller, and installation accessories. The controller energizes the damper, mounted on the return side of the HVAC blower. When the HVAC blower energizes, negative pressure draws fresh air into the home.
<b>KITCHEN VENTILATION KITS</b>				
 <b>#KV08</b>	W: 8" H: 10 3/4" D: 12 1/3"	6.00	185	The KV08, KV10 Kitchen Ventilation Kits provide make-up air locally to areas where high-CFM range hoods (typically near 400 CFM or above) are used to prevent home depressurization and its undesired side effects.
	W: 10" H: 10 3/4" D: 14 1/3"	6.70	390	
<b>FRESH AIR EXCHANGER (ERV)</b>				
 <b>#8100</b>	W: 37 3/8" H: 20 23/40" D: 12 3/4"	87.00	130	The 8100 draws in fresh outdoor air and exhausts stale indoor air, transferring energy (heating or cooling) between the two air sources, as well as transferring moisture from the higher moisture airstream to the airstream with lower moisture. This creates a balanced airflow and eliminates pressure. A ventilation controller or thermostat (both sold separately) energizes blowers within the ventilator.

# Accessories

ACCESSORIES	PRODUCT DESCRIPTION	UNIT SIZE	TYPE OF WIRE	COMPATIBLE MODELS
 <b>#8051</b>	<b>Flush Mount Sensor</b> Ideal for residential or light commercial applications where customer requires nothing to be seen on the wall.	Disk: 1 1/2" dia.  Friction fit in a 1" opening. Air gap of 1/4" required.		
 <b>#8052</b>	<b>Outdoor/Duct Sensor</b> Designed for outdoor or duct installation including with use of zone control panels.	Probe: 1/4" dia. x 1 3/4" L  Bracket: 3/4" x 3/4"	18-24 gauge 2 conductor wire (or more conductors)	8600 8620 8620W S84NSU S86NMU S86NMUPR S86WMUPR 8910 8910W 8920W 8800 8820 8830 8840
 <b>#8053</b>	<b>Surface Mount Sensor</b> Perfect for light indoor commercial applications to prevent tampering.	W: 3 1/2" H: 2 1/2" D: 7/8"		
 <b>#8022</b>	<b>3-Wire to 4-Wire Adapter</b> Used to add a wire to a thermostat, fix a broken wire or add a common wire to a 4-wire system.	W: 2 7/8" H: 1 3/4" D: 1 47/50"	All thermostats	
 <b>#8028</b>	<b>Damper Power Distribution Panel</b> For applications where needed dampers outnumber control capability of any AprilAire Zone Control Panel.	W: 10 1/2" H: 5" D: 1 7/10"	18-22 gauge stranded or solid thermostat wire can be used for all wire runs	All zone control panels
 <b>#6401</b>	<b>Expansion Panel</b> Two-zone expansion panel that supports 2-wire or 3-wire dampers.	W: 10 1/2" H: 5" D: 1 7/10"	6404 With LCD screen	
<b>AUTOMATION MODULES</b>				
 <b>#8082</b>	<b>Temperature and RH Support Module</b> Averages four temperatures (on-board or off-board) and four humidity values (on-board only).	W: 3 1/2" H: 2 1/2" D: 7/8"	Cat 6 or greater	8800 8840
 <b>#8083</b>	<b>Flush Temperature and RH Support Module</b> Averages four temperature and four RH values.	Disk: 1 1/2" dia.  Cylinder Hole: 1" off wall, 1/4" air gap		

## Ventilation climate zones

Managing the quality of ventilated air delivered into the home is critical to providing a healthy indoor environment. The requirements change significantly based on climate. AprilAire ventilation solutions work with the HVAC equipment to remove moisture, harmful particulates and other contaminants such as VOCs. It's critical to use intelligent ventilation controls and application guidance to properly ventilate rather than relying on exhaust ventilation which simply pulls air through walls.



**Source:** 2012 & 2015 International Residential Code – NII01.10 (R30.1). Zones are by county, based on factors including mean temperature, warmest month, precipitation and wet bulb temperature.

Use this map and the adjoining application guide to determine the recommended product solution for your climate. These recommendations are based on moisture removal demands, energy savings and integration with the HVAC equipment.

## Ventilation Supply Solutions

### AprilAire Ventilation Application Matrix

ZONE	CLIMATE TYPE	MAJOR CITIES	PRIMARY SOLUTION <sup>1</sup>	FRESH AIR DUCTED <sup>2</sup>	ECONOMY- OR COMFORT-FOCUSED SOLUTION	MULTI-FAMILY NEW CONSTRUCTION SOLUTION
1	Hot & Moist	Miami	E100V + 8190FF or 8192A Dehumidifies incoming ventilation air	HVAC Return	8145A or 8126A	8144NC
2	Hot & Moist	Orlando, Mobile, New Orleans, Houston, Austin, San Antonio	E100V + 8190FF or 8192A Dehumidifies incoming ventilation air	HVAC Return	8145A or 8126A	8144NC
2	Hot & Dry	Phoenix, Tucson	8142A Mixes ventilation air after cooling or heating	HVAC Supply	8126A	8144NC
3	Warm & Moist	Charlotte, Charleston, Atlanta, Little Rock, Oklahoma City, DFW	E100V + 8190FF or 8192A Dehumidifies incoming ventilation air	HVAC Return	8145A or 8126A	8144NC
3	Warm & Dry	El Paso, Las Vegas, Los Angeles, Sacramento	8142A Mixes ventilation air after cooling or heating	HVAC Supply	8126A	8144NC
3	Warm & Marine	San Francisco, San Jose	8142A Mixes ventilation air after cooling or heating	HVAC Supply	8145A or 8126A	8144NC
4	Mixed & Moist	Philadelphia, Washington DC, Baltimore, Nashville, St. Louis, Wichita, Louisville	8145A Mixes ventilation air prior to cooling or heating	HVAC Return	E100V + 8190FF, 8192A or 8126A	8144NC
4	Mixed & Dry	Albuquerque, Amarillo	8142A Mixes ventilation air after cooling or heating	HVAC Supply	8145A or 8126A	8144NC
4	Mixed & Marine	Portland, Seattle	8142A Mixes ventilation air after cooling or heating	HVAC Supply	8145A or 8126A	8144NC
5	Cool & Moist	Boston, Pittsburgh, Columbus, Indianapolis, Detroit, Chicago, Des Moines, Omaha	8145A Mixes ventilation air prior to cooling or heating	HVAC Return	8126A	8144NC
5	Cool & Dry	Denver, Salt Lake City, Boise, Reno	8145A Mixes ventilation air prior to cooling or heating	HVAC Supply or Return	8142A or 8126A	8144NC
6	Cold & Moist	Toronto, Vancouver, Milwaukee, Madison, Minneapolis-St Paul, Sioux Falls	8145A Mixes ventilation air prior to cooling or heating	HVAC Return	8126A	8144NC
6	Cold & Dry	Helena, Cheyenne	8145A Mixes ventilation air prior to cooling or heating	HVAC Return	8126A	8144NC
7	Extreme Cold & Moist	Fargo, Duluth, Calgary, Edmonton	8145A Mixes ventilation air prior to cooling or heating	HVAC Return	8126A	8144NC

<sup>1</sup> Primary AprilAire recommended supply ventilation solution for optimal performance and building code adherence.

<sup>2</sup> HVAC application considerations based upon moist versus dry air, and proper mixing into the ductwork.



## The AprilAire Healthy Air System®

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