



## All Product Guide

Quick Reference | January 2020



For more product information, refer to individual product guides at [AprilairePartners.com](http://AprilairePartners.com) or call 800.334.6011.

# Humidifiers

| Humidifiers | Type of Humidification                                                                                                                                                                                                                                                                                                   | Unit Size<br>Width x Height x Depth                                                                                                                     | Plenum<br>Opening                               | Capacity GPD =<br>Gallons Per Day | Electrical<br>Data                                                                     | Water Panel/<br>Canister |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-----------------------------------|----------------------------------------------------------------------------------------|--------------------------|
| 800 Series  |  <b>#800<sup>††</sup></b><br><b>#801<sup>***</sup></b><br><b>Steam Humidifier</b><br>For applications when evaporative units are less practical (attics, crawl spaces, closets, milder winter climates, non-forced-air heating source). | 10 $\frac{1}{8}$ " x 20 $\frac{7}{8}$ " x 7 $\frac{1}{8}$ "                                                                                             | -                                               | 11.5 GPD<br>16.0 GPD<br>20.5 GPD  | 120V 60Hz<br>11.5 AMP<br>120V 60Hz<br>16 AMP<br>208V 60Hz<br>11.5 AMP                  | 80 <sup>††</sup>         |
|             |  <b>#865</b><br><b>#866<sup>***</sup></b><br><b>Ductless Humidification System</b><br>Includes the Model 800, Fan Pack, Model 65 Control and Model 4028 Drain Trap. For homes without forced-air heating systems.                       | <b>Fan Pack:</b><br>14"x 6 $\frac{29}{32}$ " x 3 $\frac{15}{16}$ "<br><b>Finished Grille:</b><br>16 $\frac{3}{16}$ " x 9" x 1 $\frac{3}{32}$ "          | -                                               | 30.0 GPD<br>23.3 GPD<br>34.6 GPD  | 208V 60Hz<br>16 AMP<br>240V 60Hz<br>11.5 AMP<br>240V 60Hz<br>16 AMP                    |                          |
| 700 Series  |  <b>#700*</b><br><b>#700M<sup>**</sup></b><br><b>Powered Unit</b><br>Built-in fan that pulls heated air directly from the furnace.                                                                                                      | 15 $\frac{29}{32}$ " x 18" x 10 $\frac{1}{32}$ "                                                                                                        | W: 14 $\frac{3}{4}$ "<br>H: 14 $\frac{5}{16}$ " | 18 GPD                            | 120V 60Hz<br>0.8 AMP                                                                   | 35                       |
| 600 Series  |  <b>#600*</b><br><b>#600M<sup>**</sup></b><br><b>Bypass Unit</b><br>Uses the furnace blower to move air through a Water Panel®.                                                                                                         | 15 $\frac{3}{8}$ " x 15 $\frac{3}{4}$ " x 10 $\frac{1}{4}$ "<br>6" dia. round opening                                                                   | W: 10"<br>H: 12 $\frac{3}{4}$ "                 | 17 GPD                            | 24V 60Hz<br>0.5 AMP                                                                    | 35                       |
| 500 Series  |  <b>#500*</b><br><b>#500M<sup>**</sup></b><br><b>Bypass Unit</b><br>Designed for smaller homes.                                                                                                                                       | 15 $\frac{5}{8}$ " x 13" x 10 $\frac{1}{4}$ "<br>6" dia. round opening                                                                                  | W: 9 $\frac{1}{2}$ "<br>H: 9 $\frac{1}{2}$ "    | 12 GPD                            | 24V 60Hz<br>0.5 AMP                                                                    | 10                       |
| 400 Series  |  <b>#400*</b><br><b>#400M<sup>**</sup></b><br><b>Bypass Unit</b><br>Uses 100% of water and evaporative technology that eliminates the need for a drain.<br><b>Conserves Water.</b>                                                    | 15 $\frac{3}{8}$ " x 15 $\frac{3}{4}$ " x 10 $\frac{1}{4}$ "**<br>6" dia. round opening<br>See note on heat pumps†                                      | W: 10"<br>H: 12 $\frac{3}{4}$ "                 | 17 GPD                            | 24V 60Hz<br>0.5 AMP                                                                    | 45                       |
| 300 Series  |  <b>#360, #350</b><br><b>Self-contained</b><br>Designed for homes with radiators or baseboard heat.                                                                                                                                   | <b>Model 360:</b><br>13 $\frac{3}{4}$ " x 12 $\frac{3}{4}$ " x 12 $\frac{1}{2}$ "<br><b>Model 350:</b><br>13 $\frac{3}{4}$ " x 12 $\frac{3}{4}$ " x 15" | -                                               | 12 GPD                            | <b>Model 360:</b><br>120V 60Hz<br>0.7 AMP<br><b>Model 350:</b><br>120V 60Hz<br>0.9 AMP | 35                       |

| HUMIDIFIER SIZING GUIDELINES GPD Needed Per Square Foot† Based on Building Structure Tightness |          |          |          |          |          |          |          |
|------------------------------------------------------------------------------------------------|----------|----------|----------|----------|----------|----------|----------|
| Structure Tightness<br>(8 Ft Ceilings)                                                         | 1000 Ft² | 1500 Ft² | 2000 Ft² | 2500 Ft² | 3000 Ft² | 4000 Ft² | 5000 Ft² |
| Tight                                                                                          | 4.3 GPD  | 6.4 GPD  | 8.5 GPD  | 10.6 GPD | 12.7 GPD | 17 GPD   | 21.2 GPD |
| Average                                                                                        | 8.6 GPD  | 12.8 GPD | 17 GPD   | 21.3 GPD | 25.4 GPD | 34 GPD   | 42.6 GPD |
| Loose                                                                                          | 12.7 GPD | 19.1 GPD | 25.5 GPD | 31.8 GPD | 38.1 GPD | 51 GPD   | 63.6 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 mechanical 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 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.

††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.

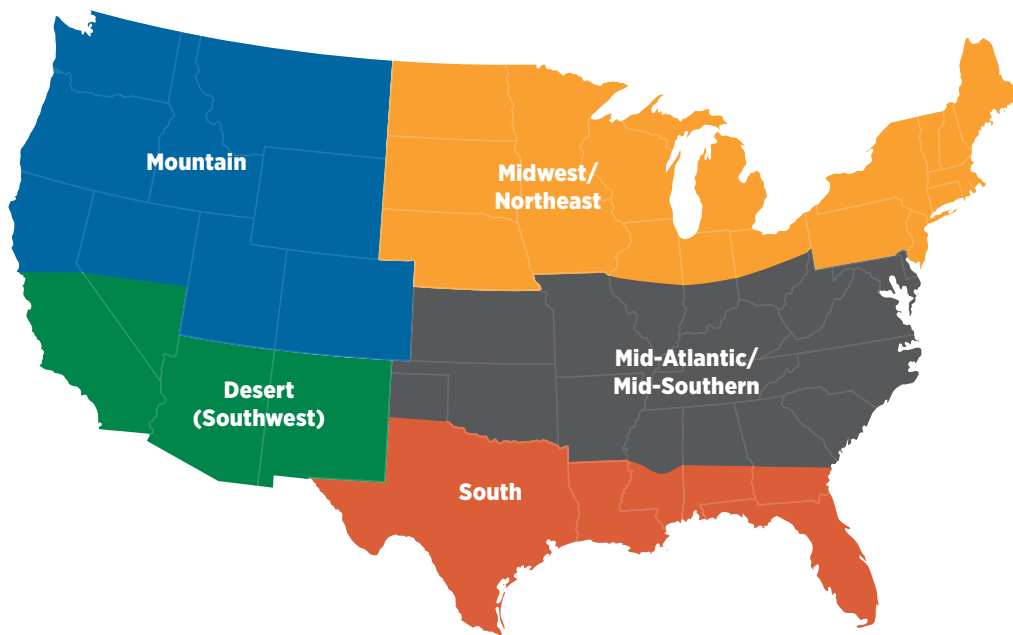
Water Usage Rate – Models 350, 360 and 700 are 6 gph (gph=gallons per hour); Models 500 and 600 are 3 gph; Model 400 is 0.7 gph; Model 800 is 0.6 to 1.8 gph depending on voltage, amp draw and water quality.

# Regional Humidifier Applications

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

The Aprilaire humidifier product portfolio consists of evaporative flow through, fan-powered products and residential steam. 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.

Aprilaire's control strategy will maximize the humidifier run time/capacity. The automatic humidity controls have an integrated blower activation relay. This relay is factory set to "ON". It will turn on the humidifier and the HVAC blower for humidification without a heat call. This will dramatically increase the capacity 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.



## Application Map

*This application map assists in the selection of the appropriate Aprilaire product based upon geography and heating equipment.*

| CLIMATE ZONE/RECOMMENDED SOLUTION BY MODEL        |                       |                               |                      |                 |                       |
|---------------------------------------------------|-----------------------|-------------------------------|----------------------|-----------------|-----------------------|
| Equipment                                         | MIDWEST/<br>NORTHEAST | MID-ATLANTIC/<br>MID-SOUTHERN | MOUNTAIN             | SOUTH           | DESERT<br>(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                                            | 865                   | 865                           | 865                  | 865             | 865                   |
| Electric Baseboard Heating                        | 865                   | 865                           | 865                  | 865             | 865                   |
| Humidifying with A/C Unit                         | N/A                   | N/A                           | 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.

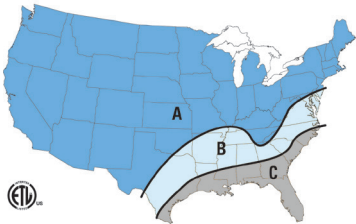
# Dehumidifiers

| Dehumidifiers                                                                                                                                                                                                     | Unit Size                     | Capacity<br>ppd =<br>Pints Per Day | Weight<br>lbs. | Efficiency<br>@ 80°F/60% RH | Airflow<br>(CFM) | Power<br>@ 80°F/<br>60% RH | Supply<br>Voltage           | Current Draw<br>@ 80°F/60% RH | Air<br>Filter | Power<br>Cord                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|------------------------------------|----------------|-----------------------------|------------------|----------------------------|-----------------------------|-------------------------------|---------------|--------------------------------|
|  <p>#1830<br/>#1830W**</p> <p>#1850<br/>#1852*<br/>#1850W**</p>                                                                   | W: 12½"<br>H: 14½"<br>D: 25"  | 70 ppd                             | 67             | 4 pints/<br>kWh             | 160              | 757 watts                  | 120 VAC<br>1 Phase<br>60 Hz | 6.3 amps                      | 1"<br>MERV 8  | 8' 120 VAC<br>Grounded<br>Plug |
|                                                                                                                                                                                                                   | W: 12½"<br>H: 14½"<br>D: 27½" | 95 ppd                             | 70             | 4.7 pints/kWh               | 265              | 870 watts                  |                             | 8.0 amps                      |               | Hardwired                      |
|                                                                                                                                                                                                                   | W: 19½"<br>H: 18½"<br>D: 30"  | 130 ppd                            | 113            | 6.1 pints/kWh               | 310              | 900 watts                  |                             | 8.3 amps                      |               | 8' 120 VAC<br>Grounded<br>Plug |
|  <p>#1870</p> <p>#1872*</p> <p>#1870W**</p>  | W: 19½"<br>H: 18½"<br>D: 30"  | 130 ppd                            | 114            | 6.1 pints/kWh               | 310              | 900 watts                  | 120 VAC<br>1 Phase<br>60 Hz | 8.3 amps                      | 1"<br>MERV 8  | 8' 120 VAC<br>Grounded<br>Plug |
|                                                                                                                                                                                                                   |                               |                                    | 113            |                             |                  |                            |                             |                               |               | Hardwired                      |

\* 1852 and 1872 are on casters

\*\* 1830W, 1850W and 1870W are hardwired units only

## 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                                                                                                                                                                                                                                                                                                                                                                                                                 |          | Model 1850 |          | Model 1870 |          |
|                                                                                     | 1.00 ACH                                                                                                                                                                                                                                                                                                                                                                                                                   | .50 ACH  | 1.00 ACH   | .50 ACH  | 1.00 ACH   | .50 ACH  |
| <b>Region A</b>                                                                     | 2800 Ft²                                                                                                                                                                                                                                                                                                                                                                                                                   | 3800 Ft² | 3800 Ft²   | 5200 Ft² | 5200 Ft²   | 7200 Ft² |
| <b>Region B</b>                                                                     | 2200 Ft²                                                                                                                                                                                                                                                                                                                                                                                                                   | 3400 Ft² | 3000 Ft²   | 4700 Ft² | 3900 Ft²   | 6500 Ft² |
| <b>Region C</b>                                                                     | 1400 Ft²                                                                                                                                                                                                                                                                                                                                                                                                                   | 2000 Ft² | 1900 Ft²   | 2800 Ft² | 2300 Ft²   | 3600 Ft² |
| ACH = Air Changes per Hour. The tighter the house, the lower the ACH.               |                                                                                                                                                                                                                                                                                                                                                                                                                            |          |            |          |            |          |



# Air Cleaners

| Air Cleaners                                                                        |                                                                                     |                                                                                   | Nominal Size<br>(in Inches) | Cabinet Size                                    | Shipping<br>Weight (lbs) | Included Filter        | Compatible Replacement<br>Filters* |                  |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------|-------------------------------------------------|--------------------------|------------------------|------------------------------------|------------------|
| 2000 Series                                                                         |    | #2216                                                                             | 20 x 25                     | W: 6¾" H: 22½" D: 27⅝"                          | 20                       | MERV 16                |                                    |                  |
|                                                                                     |                                                                                     | #2416                                                                             | 16 x 25                     | W: 6¾" H: 17¾" D: 30⅞"                          | 19.25                    | 216                    | 213CBN, 213, 210                   |                  |
|                                                                                     |                                                                                     | #2516                                                                             | 31 x 28                     | W: 6¾" H: 31" D: 30⅞"                           | 24.9                     | 416                    | 413CBN, 413, 410                   |                  |
|                                                                                     |    | #2210                                                                             | 20 x 25                     | W: 6¾" H: 22½" D: 27⅝"                          | 19                       | 516                    | 513CBN, 513, 510                   |                  |
|                                                                                     |                                                                                     | #2310                                                                             | 20 x 20                     | W: 6¾" H: 20⅝" D: 22⅞"                          | 17                       | MERV 13                |                                    |                  |
|                                                                                     |                                                                                     | #2410                                                                             | 16 x 25                     | W: 6¾" H: 17¾" D: 30⅞"                          | 19                       | 213                    | 216, 213CBN, 210                   |                  |
|                                                                                     | 1000 Series                                                                         |  | #1110                       | 16 x 20                                         | W: 6¾"H: 17¾" D: 22⅞"    | 13                     | 313                                | 310              |
|                                                                                     |                                                                                     |                                                                                   | #1210                       | 20 x 25                                         | W: 6¾" H: 22½" D: 27⅝"   | 20                     | 413                                | 416, 413CBN, 410 |
|                                                                                     |                                                                                     |                                                                                   | #1310                       | 20 x 20                                         | W: 6¾" H: 20⅝" D: 22⅞"   | 15                     | MERV 11                            |                  |
| #1410                                                                               |                                                                                     |                                                                                   | 16 x 25                     | W: 6¾" H: 17¾" D: 30⅞"                          | 19                       | 110                    | 113                                |                  |
|    |                                                                                     | #1510                                                                             | 31 x 28                     | W: 6¾" H: 31" D: 30⅞"                           | 28                       | 210                    | 216, 213CBN, 213                   |                  |
|  |                                                                                     | #1610                                                                             | 16 x 25                     | W: 15⅛" H: 17⅜" D: 30⅞"                         | 31                       | 310                    | 313                                |                  |
|                                                                                     |                                                                                     | #1620                                                                             | 20 x 25                     | W: 15⅛" H: 22⅞" D: 27⅝"                         | 32.4                     | 410                    | 416, 413CBN, 413                   |                  |
|  |                                                                                     | #1910                                                                             | 25 x 20                     | W: 6¾" H: 25⅞" D: 22⅞"                          | 18                       | 510                    | 516, 513CBN, 513                   |                  |
| 5000 Series                                                                         |  | #5000                                                                             | 16 x 25                     | W: 12" H (front): 18⅝"<br>H (back): 17¾" D: 31" | 35                       | ELECTRONIC Air Cleaner |                                    |                  |
|                                                                                     |                                                                                     |                                                                                   |                             |                                                 |                          | 501                    |                                    |                  |

\* Included filter model is also available as a replacement option.

## Filter Grille Air Cleaners\*

| Aprilaire Filter Grille<br>Air Cleaners                                             | Model No. | Nominal Size<br>(in Inches) | Filter Model | Shipping Weight |
|-------------------------------------------------------------------------------------|-----------|-----------------------------|--------------|-----------------|
|  | 1625FG11  | 16 x 25                     | 610          | 16 lbs.         |
|                                                                                     | 1625FG13  |                             | 613          |                 |
|  | 2025FG11  | 20 x 25                     | 810          | 18 lbs.         |
|                                                                                     | 2025FG13  |                             | 813          |                 |



\*Recommended grille face velocity is 300-450 fpm. To minimize risk of noise, use two filter grilles on systems over 3.5 tons.

# Air Cleaner Filters

| PRESSURE DROP CHART         |                                              |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------------|----------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 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<br>ALLERGY & ASTHMA | 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 |      |
| MERV 13<br>HEALTHY HOME     | 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 |      |      |      |      |
|                             | 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 |
|                             | 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 |      |      |      |      |
| MERV 13<br>ODOR REDUCTION   | 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 |
| MERV 11<br>CLEAN AIR        | 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 |
|                             | 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 |      |      |      |      |
|                             | 910                                          | -    | 0.03 | 0.05 | 0.07 | 0.09 | 0.12 | 0.15 | 0.18 | 0.22 | 0.27 |      |      |      |      |
| MERV 10                     | 201                                          | 0.02 | 0.04 | 0.05 | 0.08 | 0.10 | 0.12 | 0.15 | 0.18 | 0.21 | 0.25 |      |      |      |      |
|                             | 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 Cleaner Filters

| REMOVAL EFFICIENCY (Based on Particle Size) |                 |                 |                  |
|---------------------------------------------|-----------------|-----------------|------------------|
|                                             | 0.3–1.0 Microns | 1.0–3.0 Microns | 3.0–10.0 Microns |
| <b>MERV 16</b>                              | 95%             | 98%             | 99%              |
| <b>MERV 13</b>                              | 63%             | 88%             | 93%              |
| <b>MERV 11</b>                              | 37%             | 67%             | 92%              |
| <b>MERV 10</b>                              | 22%             | 56%             | 92%              |
| <b>EAC<br/>(Model 5000)</b>                 | 89%             | 95%             | 98%              |

Test Method – MERV 10-16 –ASHRAE 52.2.2012, EAP – AHRI 680-2009

| UPGRADE KITS   |                                                                                   | Compatible With                       | Nominal Size<br>(in inches) | Included<br>Filter | Rails<br>Model<br>Number | Static Pressure Drop<br>(in. w.c.) @ 1200 CFM | Maximum Airflow<br>Capacity (in CFM) |
|----------------|-----------------------------------------------------------------------------------|---------------------------------------|-----------------------------|--------------------|--------------------------|-----------------------------------------------|--------------------------------------|
| <b>MERV 13</b> |  | #1213<br>Aprilaire/Space-Gard<br>2200 | 20 x 25                     | 213                | 4893                     | 0.15                                          | 2000                                 |
|                |                                                                                   | #1413<br>Aprilaire/Space-Gard<br>2400 | 16 x 25                     | 413                | 4894                     | 0.17                                          | 2000                                 |

| UPGRADE RAILS                                                                       |                | Compatible With                                                                                                   | Nominal Size<br>(in inches) | Uses Filter Model | Maximum Airflow<br>Capacity (in CFM) |
|-------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------------------------------------|-----------------------------|-------------------|--------------------------------------|
|  | #4893          | Aprilaire/Space-Gard<br>2200 or 2120                                                                              | 20x25                       | 210, 213, 213CBN  | 2000                                 |
|                                                                                     | #4894          | Aprilaire/Space-Gard<br>2400 or 2140                                                                              | 16x25                       | 410, 413, 413CBN  | 2000                                 |
|                                                                                     | #4897<br>#4898 | Models by<br>(but not limited to):<br><br>Carrier®<br>Honeywell®<br>Lennox®<br>Ultravation®<br>General®<br>Trion® | 16x25                       | 610, 613          | 2000                                 |
|                                                                                     |                |                                                                                                                   | 20x25                       | 810, 813          | 2000                                 |
|                                                                                     |                |                                                                                                                   | 16x20                       | 110, 113          | 1200                                 |
|                                                                                     |                |                                                                                                                   | 20x20                       | 310, 313          | 1200                                 |

| REPLACEMENT FILTERS |     |                                        |                             |                                               |                                   |
|---------------------|-----|----------------------------------------|-----------------------------|-----------------------------------------------|-----------------------------------|
| Filter No.          |     | Used with Aprilaire Air Cleaner Models | Nominal Size<br>(in inches) | Static Pressure Drop<br>(in. w.c.) @ 1200 CFM | Maximum Airflow Capacity (in CFM) |
| MERV 10             | 201 | 2200 Space-Gard, 2200 Aprilaire*       | 20 x 25                     | 0.12                                          | 2000                              |
|                     | 401 | 2400 Space-Gard, 2400 Aprilaire*       | 16 x 25                     | 0.14                                          | 2000                              |

\*Air Cleaner models no longer available.

# Thermostat & IAQ Controls



|                                                                                                                 |                                                   | Non-Programmable                                             | Programmable                                                 | Programmable with Event-Based™ Air Cleaning** | Programmable Touch Screen | Programmable Touch Screen with Humidity Control** | IAQ Control**<br>Equipment Control Module = 8½" x 9½" x 1½" |                                   |
|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|-----------------------------------------------|---------------------------|---------------------------------------------------|-------------------------------------------------------------|-----------------------------------|
| Residential Model No. • Stages                                                                                  |                                                   | 8444 • 1H/1C<br>8446 • 2H/1C HP<br>8448 • 2H/2C,<br>4H/2C HP | 8463 • 1H/1C<br>8465 • 2H/1C HP<br>8466 • 2H/2C,<br>4H/2C HP | 8476W(Wi-Fi)<br>8476 • 2H/2C,<br>4H/2C HP     | 8600 • 2H/2C,<br>4H/2C HP | 8620W(Wi-Fi)<br>8620 • 2H/2C,<br>4H/2C HP         | 8910W(Wi-Fi)<br>8910 • 3H/3C,<br>4H/2C HP                   | 8920W(Wi-Fi) •<br>3H/3C, 4H/2C HP |
| Home Automation Model No.                                                                                       |                                                   | -                                                            | -                                                            | 8810                                          | 8800                      | 8820                                              | 8830                                                        | 8840                              |
| Dimensions (W x H x D)                                                                                          |                                                   | 5¼" x 4½" x 1"                                               |                                                              |                                               | 6" x 4½" x 1½"            |                                                   | 6" x 4½" x 1¼"                                              | 7½" x 4½" x 1"                    |
|  <b>Temperature Control</b>     | Easy to Read Display                              | ●                                                            | ●                                                            | ●                                             | ●                         | ●                                                 | ●                                                           | ●                                 |
|                                                                                                                 | Simple Setup                                      | ●                                                            | ●                                                            | ●                                             | ●                         | ●                                                 | ●                                                           | ●                                 |
|                                                                                                                 | Displays Outdoor Temperature (if equipped)        | ●                                                            | ●                                                            | ●                                             | ●                         | ●                                                 | ●                                                           | ●                                 |
|                                                                                                                 | Adjustable Differential                           | ●                                                            | ●                                                            | ●                                             | ●                         | ●                                                 | ●                                                           | ●                                 |
|                                                                                                                 | Progressive Recovery                              |                                                              | ●                                                            | ●                                             | ●                         | ●                                                 | ●                                                           | ●                                 |
|                                                                                                                 | Heat Blast                                        |                                                              |                                                              |                                               |                           | ●                                                 | ●                                                           | ●                                 |
|  <b>Air Cleaning</b>           | Event-Based™ Air Cleaning                         |                                                              |                                                              | ●                                             |                           | ●                                                 | ●                                                           | ●                                 |
|                                                                                                                 | Air Cleaning Notice                               |                                                              |                                                              | ●                                             |                           | ●                                                 | ●                                                           | ●                                 |
|                                                                                                                 | Change Filter Alert                               | ●                                                            | ●                                                            | ●                                             | ●                         | ●                                                 | ●                                                           | ●                                 |
|  <b>Humidifier Control</b>   | Automatic or Manual Humidifier Control            |                                                              |                                                              |                                               |                           | ●                                                 | ●                                                           | ●                                 |
|                                                                                                                 | "Humidifier On" Notice                            |                                                              |                                                              |                                               |                           | ●                                                 | ●                                                           | ●                                 |
|                                                                                                                 | Displays Indoor RH                                |                                                              |                                                              |                                               |                           | ●                                                 | ●                                                           | ●                                 |
|                                                                                                                 | Energizes HVAC Blower for Humidity                |                                                              |                                                              |                                               |                           | ●                                                 | ●                                                           | ●                                 |
|                                                                                                                 | Controls Humidifier with 24 VAC Dry Contact       |                                                              |                                                              |                                               |                           | ●                                                 | ●                                                           | ●                                 |
|  <b>Dehumidifier Control</b> | Controls Whole-Home Dehumidifier                  |                                                              |                                                              |                                               |                           | ●                                                 | ●                                                           | ●                                 |
|                                                                                                                 | Controls A/C Equipment for Dehumidification       |                                                              |                                                              |                                               |                           | ●                                                 | ●                                                           | ●                                 |
|                                                                                                                 | Displays Indoor RH                                |                                                              |                                                              |                                               |                           | ●                                                 | ●                                                           | ●                                 |
|                                                                                                                 | "Dehumidifier On" Notice                          |                                                              |                                                              |                                               |                           | ●                                                 | ●                                                           | ●                                 |
|                                                                                                                 | Energizes HVAC Blower for Dehumidification        |                                                              |                                                              |                                               |                           | ●                                                 | ●                                                           | ●                                 |
|                                                                                                                 | Controls Dehumidifier with 24 VAC Dry Contact     |                                                              |                                                              |                                               |                           | ●                                                 | ●                                                           | ●                                 |
|  <b>Ventilation Control</b>   | Programmable for Timed Ventilation                |                                                              |                                                              |                                               |                           | ●                                                 | ●                                                           | ●                                 |
|                                                                                                                 | Programmable for ASHRAE 62.2 Ventilation          |                                                              |                                                              |                                               |                           | ●                                                 | ●                                                           | ●                                 |
|                                                                                                                 | Configurable Temperature and Humidity Limits      |                                                              |                                                              |                                               |                           | ●                                                 | ●                                                           | ●                                 |
|                                                                                                                 | "Ventilation On" Notice                           |                                                              |                                                              |                                               |                           | ●                                                 | ●                                                           | ●                                 |
|  <b>Product Configuration</b> | 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  |                                                              |                                                              |                                               |                           |                                                   | ●                                                           | ●                                 |

\*\*   = amazonalexa Compatible  = Google Assistant Compatible

# Zone Control Systems

| 6000 Series Product Configurations |                                                                                     |                                                                                     |
|------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Kits                               | Black                                                                               | White                                                                               |
| 2-Zone                             | <b>Model 6010: 2-Zone Complete Kit*</b>                                             | <b>Model 6015: 2-Zone Complete Kit*</b>                                             |
|                                    |    |   |
| 3-Zone                             | <b>Model 6020: 3-Zone Complete Kit*</b>                                             | <b>Model 6025: 3-Zone Complete Kit*</b>                                             |
|                                    |    |   |
| Individual Components              | Model 6030: 2-Zone Base<br>Model 6040: 3-Zone Base<br>Model 6050: Secondary Zone UI | Model 6035: 2-Zone Base<br>Model 6045: 3-Zone Base<br>Model 6055: Secondary Zone UI |

\* Kits include outdoor temperature sensor along with duct probe

# Zone Control Panels

| Model                                                  |                                                                                     | Specifications                                                                                                                                                                                                                                      |                       |                                                                                                                  |                                                                                                                                                                                                                                                 |
|--------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Universal                                              |  | <b>6404 – 4 Zone Universal Multistage</b><br>(Can be expanded to 12 zones with Model 6401)<br><br><b>6403 – 3 Zone Universal Multistage</b><br>+ 2 Heat 2 Cool or 4 Heat 2 Cool (Heat Pump)<br>+ Compatible with Model 8056 wireless outdoor sensor | Overall Dimensions    | 8 <sup>63</sup> / <sub>100</sub> " W x 9 <sup>33</sup> / <sub>50</sub> " H x 1 <sup>43</sup> / <sub>50</sub> " D | <b>Maximum Current</b><br>Damper output per zone (fused):<br>18VA at 158°F, 30VA at 90°F zone panel and thermostats (fused):<br>18VA at 158°F, 30VA at 90°F zone panel consumption: 4VA max<br>Note: Use 18 or 20 AWG solid (non-stranded) wire |
|                                                        |                                                                                     |                                                                                                                                                                                                                                                     | Humidity              | 5%–90% RH, non-condensing                                                                                        |                                                                                                                                                                                                                                                 |
|                                                        |                                                                                     |                                                                                                                                                                                                                                                     | Operating Temperature | 32°F–158°F                                                                                                       |                                                                                                                                                                                                                                                 |
|                                                        |                                                                                     |                                                                                                                                                                                                                                                     | Shipping Temperature  | –40°F–180°F                                                                                                      |                                                                                                                                                                                                                                                 |
|                                                        |                                                                                     |                                                                                                                                                                                                                                                     | Voltage               | 18–30VAC 50/60 Hz                                                                                                |                                                                                                                                                                                                                                                 |
| Zoned Comfort Control™ Kits** Available: 6404K & 6403K |                                                                                     |                                                                                                                                                                                                                                                     |                       |                                                                                                                  |                                                                                                                                                                                                                                                 |
| Heat Pump Only                                         |  | <b>6303 – 3 Zone Heat Pump</b><br><b>6302 – 2 Zone Heat Pump</b><br>+ 2 Heat 1 Cool Single Stage                                                                                                                                                    | Overall Dimensions    | 8 <sup>63</sup> / <sub>100</sub> " W x 9 <sup>33</sup> / <sub>50</sub> " H x 1 <sup>43</sup> / <sub>50</sub> " D | <b>Maximum Current</b><br>Damper output per zone (fused):<br>18VA at 158°F, 30VA at 90°F zone panel and thermostats (fused):<br>18VA at 158°F, 30VA at 90°F zone panel consumption: 4VA max<br>Note: Use 18 or 20 AWG solid (non-stranded) wire |
|                                                        |                                                                                     |                                                                                                                                                                                                                                                     | Humidity              | 5% - 90% RH, non-condensing                                                                                      |                                                                                                                                                                                                                                                 |
|                                                        |                                                                                     |                                                                                                                                                                                                                                                     | Operating Temperature | 32°F–158°F                                                                                                       |                                                                                                                                                                                                                                                 |
|                                                        |                                                                                     |                                                                                                                                                                                                                                                     | Shipping Temperature  | –40°F–180°F                                                                                                      |                                                                                                                                                                                                                                                 |
|                                                        |                                                                                     |                                                                                                                                                                                                                                                     | Voltage               | 18–30VAC 50/60 Hz                                                                                                |                                                                                                                                                                                                                                                 |
| Zoned Comfort Control™ Kits** Available: 6303K & 6302K |                                                                                     |                                                                                                                                                                                                                                                     |                       |                                                                                                                  |                                                                                                                                                                                                                                                 |
| Conventional Only                                      |  | <b>6203 – 3 Zone Heat/Cool</b><br><b>6202 – 2 Zone Heat/Cool</b><br>+ 1 Heat 1 Cool Single Stage                                                                                                                                                    | Overall Dimensions    | 8 <sup>63</sup> / <sub>100</sub> " W x 9 <sup>33</sup> / <sub>50</sub> " H x 1 <sup>43</sup> / <sub>50</sub> " D | <b>Maximum Current</b><br>Damper output per zone (fused):<br>18VA at 158°F, 30VA at 90°F zone panel and thermostats (fused):<br>18VA at 158°F, 30VA at 90°F zone panel consumption: 4VA max<br>Note: Use 18 or 20 AWG solid (non-stranded) wire |
|                                                        |                                                                                     |                                                                                                                                                                                                                                                     | Humidity              | 5%–90% RH, non-condensing                                                                                        |                                                                                                                                                                                                                                                 |
|                                                        |                                                                                     |                                                                                                                                                                                                                                                     | Operating Temperature | 32°F–158°F                                                                                                       |                                                                                                                                                                                                                                                 |
|                                                        |                                                                                     |                                                                                                                                                                                                                                                     | Shipping Temperature  | –40°F–180°F                                                                                                      |                                                                                                                                                                                                                                                 |
|                                                        |                                                                                     |                                                                                                                                                                                                                                                     | Voltage               | 18–30VAC 50/60 Hz                                                                                                |                                                                                                                                                                                                                                                 |
| Zoned Comfort Control™ Kits** Available: 6303K & 6302K |                                                                                     |                                                                                                                                                                                                                                                     |                       |                                                                                                                  |                                                                                                                                                                                                                                                 |

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

# Zone Dampers

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

\* Rectangular Damper Dimension = Nominal width + 3.5"

\* 10 day lead time for shaded items

# Zone Dampers

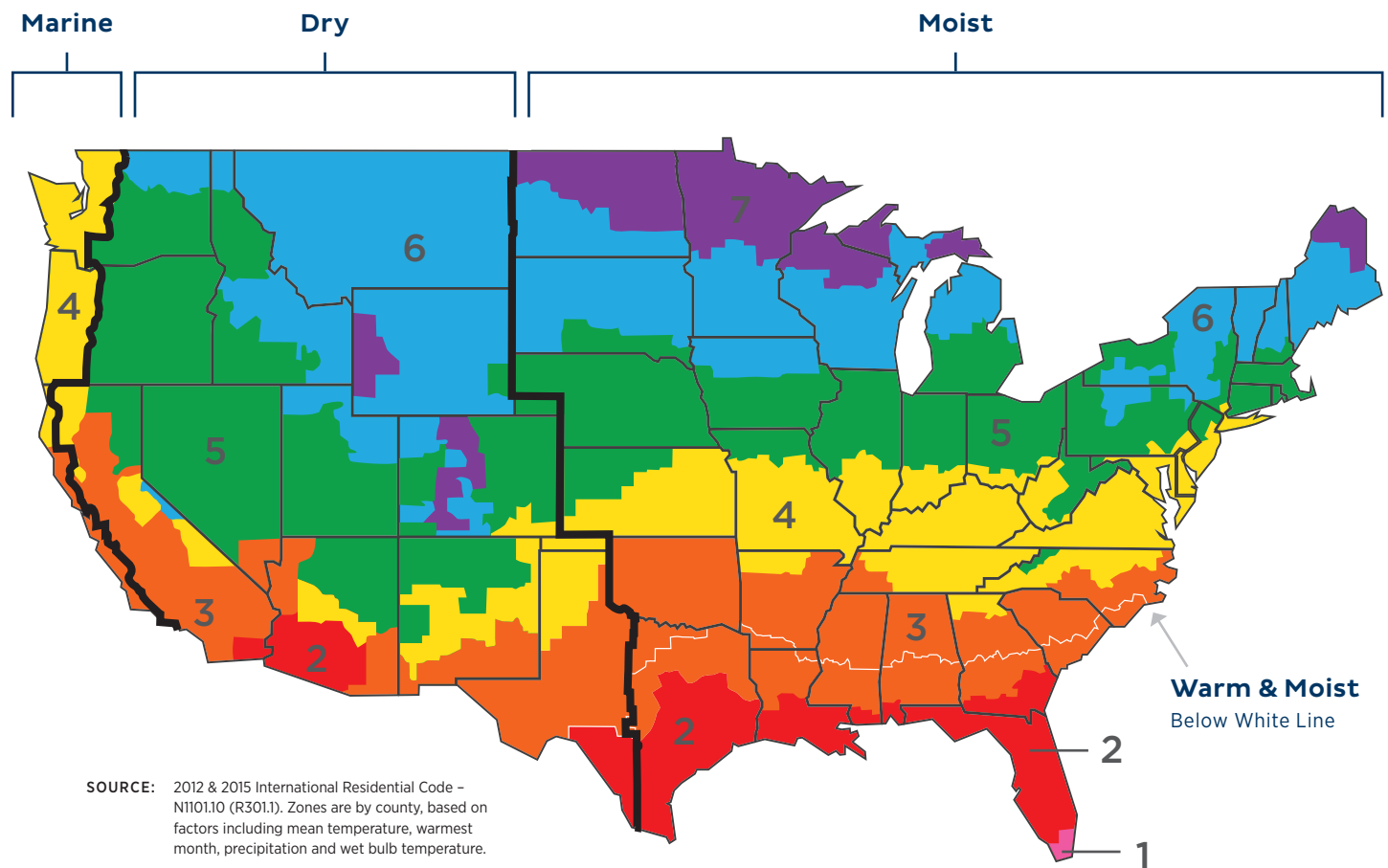
|                                                                                     |                                                                                                            | Round Damper Size & Stock No.* |                             |                                           |                              |                              |                |                              |                |                |                |                        |                |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------|-------------------------------------------|------------------------------|------------------------------|----------------|------------------------------|----------------|----------------|----------------|------------------------|----------------|
|                                                                                     |                                                                                                            | Nominal Diameter (in inches)   |                             |                                           |                              |                              |                |                              |                |                |                |                        |                |
|                                                                                     |                                                                                                            | 4"<br>(102mm)                  | 5"<br>(127mm)               | 6"<br>(152mm)                             | 7"<br>(178mm)                | 8"<br>(203mm)                | 9"<br>(229mm)  | 10"<br>(254mm)               | 12"<br>(305mm) | 14"<br>(356mm) | 16"<br>(406mm) | 18"<br>(457mm)         | 20"<br>(508mm) |
|    | <b>Zone Damper</b><br><br>(Normally open/power closed)<br><br><i>W3 indicates power open/ power closed</i> |                                |                             | 6606<br>6606W3                            | 6607<br>6607W3               | 6608<br>6608W3               | 6609<br>6609W3 | 6610<br>6610W3               | 6612<br>6612W3 | 6614<br>6614W3 | 6616<br>6616W3 | 6618                   | 6620           |
|                                                                                     |                                                                                                            |                                |                             | H: 10¾"                                   | H: 10¾"                      | H: 10¾"                      | H: 10¾"        | H: 10¾"                      | H: 12¾"        | H: 14¾"        | H: 16¾"        | H: 19¾ <sub>60</sub> " | H: 22"         |
|    | <b>Ventilation Damper</b><br><br>(Normally closed/ power opened)                                           |                                |                             | 6506                                      |                              | 6508                         |                | 6510                         |                |                |                |                        |                |
|                                                                                     |                                                                                                            |                                |                             | H: 10¾"                                   |                              | H: 10¾"                      |                | H: 10¾"                      |                |                |                |                        |                |
|  | <b>Barometric Pressure Relief</b><br><br>(Air flow activated)                                              |                                |                             |                                           |                              | 6108                         |                | 6110                         | 6112           | 6114           | 6116           |                        |                |
|                                                                                     |                                                                                                            |                                |                             |                                           |                              | H: 10¾"                      |                | H: 10¾"                      | H: 12¾"        | H: 14¾"        | H: 16¾"        |                        |                |
|  | <b>Static Pressure Relief</b><br><br>(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><br><br>(Normally open/power closed)                                            | 6704                           | 6705                        | 6706                                      | 6707                         | 6708                         |                | 6710                         |                |                |                |                        |                |
|                                                                                     |                                                                                                            | W: 3⅝"<br>H: 12⅜"<br>D: 7⅜"    | W: 3⅝"<br>H: 12⅜"<br>D: 8⅜" | W: 3⅝"<br>H: 12⅜ <sub>4</sub> "<br>D: 9⅜" | W: 3⅝"<br>H: 12⅜"<br>D: 10⅜" | W: 3⅝"<br>H: 12⅜"<br>D: 11⅜" |                | W: 3⅝"<br>H: 12⅜"<br>D: 13⅜" |                |                |                |                        |                |

\* Round Damper Dimension = Nominal diameter + 4.5"

† 10 day lead time for shaded items

# 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.



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 Residential New Construction 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                                                                             | <b>8192</b><br>Dehumidifies incoming ventilation air             | HVAC Return                   | <b>8140 or 8126X</b>                 | <b>8144NC</b>                          |
| 2    | Hot & Moist          | Orlando, Mobile, New Orleans, Houston, Austin, San Antonio                        | <b>8192</b><br>Dehumidifies incoming ventilation air             | HVAC Return                   | <b>8140 or 8126X</b>                 | <b>8144NC</b>                          |
| 2    | Hot & Dry            | Phoenix, Tucson                                                                   | <b>8142</b><br>Mixes ventilation air after cooling or heating    | HVAC Supply                   | <b>8126X</b>                         | <b>8144NC</b>                          |
| 3    | Warm & Moist         | Charlotte, Charleston, Atlanta, Little Rock, Oklahoma City, DFW                   | <b>8192</b><br>Dehumidifies incoming ventilation air             | HVAC Return                   | <b>8140 or 8126X</b>                 | <b>8144NC</b>                          |
| 3    | Warm & Dry           | El Paso, Las Vegas, Los Angeles, Sacramento                                       | <b>8142</b><br>Mixes ventilation air after cooling or heating    | HVAC Supply                   | <b>8126X</b>                         | <b>8144NC</b>                          |
| 3    | Warm & Marine        | San Francisco, San Jose                                                           | <b>8142</b><br>Mixes ventilation air after cooling or heating    | HVAC Supply                   | <b>8140 or 8126X</b>                 | <b>8144NC</b>                          |
| 4    | Mixed & Moist        | Philadelphia, Washington DC, Baltimore, Nashville, St. Louis, Wichita, Louisville | <b>8140</b><br>Mixes ventilation air prior to cooling or heating | HVAC Return                   | <b>8191, 8192 or 8126X</b>           | <b>8144NC</b>                          |
| 4    | Mixed & Dry          | Albuquerque, Amarillo                                                             | <b>8142</b><br>Mixes ventilation air after cooling or heating    | HVAC Supply                   | <b>8140 or 8126X</b>                 | <b>8144NC</b>                          |
| 4    | Mixed & Marine       | Portland, Seattle                                                                 | <b>8142</b><br>Mixes ventilation air after cooling or heating    | HVAC Supply                   | <b>8140 or 8126X</b>                 | <b>8144NC</b>                          |
| 5    | Cool & Moist         | Boston, Pittsburgh, Columbus, Indianapolis, Detroit, Chicago, Des Moines, Omaha   | <b>8140</b><br>Mixes ventilation air prior to cooling or heating | HVAC Return                   | <b>8126X</b>                         | <b>8144NC</b>                          |
| 5    | Cool & Dry           | Denver, Salt Lake City, Boise, Reno                                               | <b>8140</b><br>Mixes ventilation air prior to cooling or heating | HVAC Supply or Return         | <b>8142 or 8126X</b>                 | <b>8144NC</b>                          |
| 6    | Cold & Moist         | Toronto, Vancouver, Milwaukee, Madison, Minneapolis-St Paul, Sioux Falls          | <b>8140</b><br>Mixes ventilation air prior to cooling or heating | HVAC Return                   | <b>8126X</b>                         | <b>8144NC</b>                          |
| 6    | Cold & Dry           | Helena, Cheyenne                                                                  | <b>8140</b><br>Mixes ventilation air prior to cooling or heating | HVAC Return                   | <b>8126X</b>                         | <b>8144NC</b>                          |
| 7    | Extreme Cold & Moist | Fargo, Duluth, Calgary, Edmonton                                                  | <b>8140</b><br>Mixes ventilation air prior to cooling or heating | HVAC Return                   | <b>8126X</b>                         | <b>8144NC</b>                          |

<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.

# Ventilation

| Ventilation Systems                                                                                                  | Unit Size                     | Shipping Weight lbs. | Airflow 0.2 in. w.c. @ (CFM) | Description                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------|-------------------------------|----------------------|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FRESH AIR VENTILATOR WITH DEHUMIDIFICATION                                                                           |                               |                      |                              |                                                                                                                                                                                                                                                                                                                                                              |
|  <b>#8192</b><br>95 ppd*            | W: 12½"<br>H: 14½"<br>L: 27½" | 84.00                | 230                          | The 8192 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 8192.<br><br>*Dehumidification Capacity 95 Pints Per Day                                              |
| FRESH AIR VENTILATORS                                                                                                |                               |                      |                              |                                                                                                                                                                                                                                                                                                                                                              |
|  <b>#8140</b><br><b>#8140NC</b>     | W: 14½"<br>H: 11½"<br>L: 27½" | 30.50<br>30.00       | 225                          | The 8140 or 8142 delivers fresh air into the return or supply duct by energizing its fan and opening its integrated damper. Both models feature an 8120X ventilation controller integrated into the unit. NC models do not include an onboard controller so that ventilation can be controlled via thermostat.                                               |
|  <b>#8142</b><br><b>#8142NC</b>     | W: 13½"<br>H: 6⅞"<br>L: 11⅞"  | 12.36<br>9.80        | 210                          |                                                                                                                                                                                                                                                                                                                                                              |
|  <b>#8144NC</b>                     | W: 10¼"<br>H: 18⅞"<br>D: 10¼" | 20.50                | 130                          | The 8144NC provides continuous low-volume ventilation for smaller single- and multi-family homes. A separate 8120X ventilation controller can be added to set the unit to operate by the controller's Code or Comfort functions.                                                                                                                             |
| VENTILATION CONTROLLER                                                                                               |                               |                      |                              |                                                                                                                                                                                                                                                                                                                                                              |
|  <b>#8120X</b>                    | W: 4⅞"<br>H: 3⅞"<br>D: 1⅝"    | .50                  |                              | The 8120X engages a fan or damper on ventilation solutions to deliver fresh air to return or supply duct. The control can be programmed to deliver the correct amount of fresh air required by code, or it can provide fresh air within set high/low outdoor temperature and indoor RH limits                                                                |
| VENTILATION SYSTEM                                                                                                   |                               |                      |                              |                                                                                                                                                                                                                                                                                                                                                              |
|  <b>#8126X</b>                    | W: 10⅞"<br>H: 10¾"<br>D: 6"   | 6.50                 |                              | The 8126X 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.                                                                                              |
| KITCHEN VENTILATION KITS                                                                                             |                               |                      |                              |                                                                                                                                                                                                                                                                                                                                                              |
|  <b>#6508KV</b><br><b>#6510KV</b> | W: 8"<br>H: 10¾"<br>D: 12½"   | 6.00                 | 185                          | The 6508KV, 6510KV 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"<br>H: 10¾"<br>D: 14½"  | 6.70                 | 390                          |                                                                                                                                                                                                                                                                                                                                                              |
| FRESH AIR EXCHANGER (ERV)                                                                                            |                               |                      |                              |                                                                                                                                                                                                                                                                                                                                                              |
|  <b>#8100</b>                     | W: 37⅞"<br>H: 20⅜"<br>D: 12¾" | 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 removing moisture from the incoming air. 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                                                               |
|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| <br><b>#8051</b>   | <b>Flush Mount Sensor</b><br>Ideal for residential or light commercial applications where customer requires nothing to be seen on the wall.       | <b>Disk:</b> 1½" dia.<br><br><b>Friction fit</b> in a 1" opening. Air gap of ¼" required. | 18-24 gauge<br>2 conductor wire<br>(or more conductors)                                 | 8600<br>8620<br>8620W<br>8910<br>8910W<br>8920W<br>8800<br>8820<br>8830<br>8840 |
| <br><b>#8052</b>   | <b>Outdoor/Duct Sensor</b><br>Designed for outdoor or duct installation including with use of zone control panels.                                | <b>Probe:</b><br>¼" dia. x 1¾" L<br><br><b>Bracket:</b><br>¾" x ¾"                        |                                                                                         |                                                                                 |
| <br><b>#8053</b>   | <b>Surface Mount Sensor</b><br>Perfect for light indoor commercial applications to prevent tampering.                                             | <b>W:</b> 3½"<br><b>H:</b> 2½"<br><b>D:</b> ⅞"                                            |                                                                                         |                                                                                 |
| <br><b>#8022</b>   | <b>3-Wire to 4-Wire Adapter</b><br>Used to add a wire to a thermostat, fix a broken wire or add a common wire to a 4-wire system.                 | <b>W:</b> 2⅞"<br><b>H:</b> 1¾"<br><b>D:</b> 1 <sup>47</sup> / <sub>60</sub> "             | 18-22 gauge<br>stranded or solid<br>thermostat wire<br>can be used for<br>all wire runs | All thermostats                                                                 |
| <br><b>#8028</b> | <b>Damper Power Distribution Panel</b><br>For applications where needed dampers outnumber control capability of any Aprilaire Zone Control Panel. | <b>W:</b> 10½"<br><b>H:</b> 5"<br><b>D:</b> 1 <sup>7</sup> / <sub>10</sub> "              |                                                                                         | All zone control panels                                                         |
| <br><b>#6401</b> | <b>Expansion Panel</b><br>Two-zone expansion panel that supports 2-wire or 3-wire dampers.                                                        | <b>W:</b> 10½"<br><b>H:</b> 5"<br><b>D:</b> 1 <sup>7</sup> / <sub>10</sub> "              |                                                                                         | 6404<br>With LCD screen                                                         |
| AUTOMATION MODULES                                                                                  |                                                                                                                                                   |                                                                                           |                                                                                         |                                                                                 |
| <br><b>#8081</b> | <b>Temperature Support Module</b><br>Averages up to eight temperature locations per thermostat.                                                   | <b>W:</b> 3½"<br><b>H:</b> 2½"<br><b>D:</b> ⅞"                                            | Cat 6 or greater                                                                        | 8800<br>8820<br>8830<br>8840                                                    |
| <br><b>#8082</b> | <b>Temperature and RH Support Module</b><br>Averages four temperatures (on-board or off-board) and four humidity values (on-board only).          | <b>W:</b> 3½"<br><b>H:</b> 2½"<br><b>D:</b> ⅞"                                            |                                                                                         |                                                                                 |
| <br><b>#8083</b> | <b>Flush Temperature and RH Support Module</b><br>Averages four temperature and four RH values.                                                   | <b>Disk:</b> 1½" dia.<br><br><b>Cylinder Hole:</b><br>1" off wall, ¼" air gap             |                                                                                         |                                                                                 |

