

Project: \_\_\_\_\_

Architect: \_\_\_\_\_

Contractor: \_\_\_\_\_

Suppliers: \_\_\_\_\_

Dealer: \_\_\_\_\_

Engineer: \_\_\_\_\_

Location: \_\_\_\_\_

Date: \_\_\_\_\_

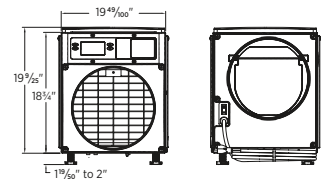
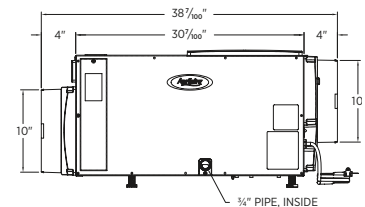
#### SPECIFICATIONS

Model	1870/1870W	1872
<b>Capacity<sup>(1)</sup></b> (water removal)	130 ppd	
<b>Energy factor<sup>(1)</sup></b> (efficiency)	2.9 L/kWh (6.13 pints/kWh)	
<b>Voltage, phase, frequency</b>	120VAC, 1 Phase, 60Hz	
<b>Current draw<sup>(1)</sup></b>	8.3 Amps	
<b>Airflow</b>	310 CFM @ 0.0" w.c., 226 CFM @ 0.4" w.c.	
<b>Noise</b>	50 dBA ducted	
<b>Dimensions</b> (cabinet only) <sup>(2)</sup>	Width: 19½"	
	Height: 18¾"	
	Length: 30" without collars 38" with collars	
<b>Weight</b>	113 lbs.	114 lbs.
<b>Control</b>	Built-in digital control with display	
<b>Filter</b>	Washable MERV 8	
<b>Refrigerant</b>	R410A	
<b>Coil type</b>	Corrosion-resistant aluminum	
<b>8' Power cord</b>	Plug type (1870, 1872 only)	
<b>Casters or leveling feet</b>	Leveling feet	Casters
<b>Duct connection</b>	10" round	
<b>Drain connection<sup>(3)</sup></b>	3/4" nominal drain tubing; Supplemental barb fitting for 1/2" clear drain tubing	
<b>Control mounting</b>	Field-interchangeable from top to front	
<b>Cabinet insulation</b>	1/2" EPS	
<b>Air discharge</b>	Interchangeable from end to top	
<b>Duct collars</b>	10" round at inlet and outlet	
<b>Backdraft Damper</b>	Included in outlet duct collar	
<b>Warranty</b>	5 Years on all parts	

<sup>(1)</sup>Rated capacity, energy factor and current draw measured at 80°F/60% RH inlet air at 0.0 ESP.

<sup>(2)</sup>Add up to 2" to the dehumidifier's height to account for the adjustable leveling feet, or 2 ½" for the casters. Width excludes the filter doors.

<sup>(3)</sup>Adapters for threaded connection for plastic hose included.



90-2053

- **1870W:** Terminal connection for hard wiring
- **1872:** Uses casters instead of leveling feet.

#### OPERATION

The Aprilaire 1870 Series dehumidifiers are designed to dehumidify the air coming into the unit by passing the incoming air over an evaporator coil, dropping the air temperature below the dew point. The moisture is removed from the air and drains out of the dehumidifier to a common floor or waste drain. The air is then reheated in the condenser coil and exits the unit.

Dehumidification occurs until the relative humidity (%RH) setting is reached. The unit then shuts off until periodic sampling determines the need for dehumidification. The integrated digital display and control monitors the %RH during sampling of the incoming room or HVAC return air.

#### APPLICATION

Aprilaire 1870 Series dehumidifiers are the perfect product for whole-home dehumidification, basements, crawl spaces and sealed attics.

#### VENTILATION

All 1870 Series models have the ability to bring in fresh, outdoor air into the living space. Fresh air will dilute stale air and pollutants and will reduce humidity in the winter months. If the humidity level of the outdoor air higher than the %RH setting, the dehumidifier will begin dehumidification to reduce the humidity in the home to set humidity level. The outdoor fresh air is brought in through 6" round duct with a 6" round, normally closed damper. This complies with ASHRAE 62.2-2010, Energy Star, and 2012 International Residential Code (IRC).

The dehumidifier has built in controls to adjust the amount of fresh air that is brought in to the home. If wired to the HVAC system, the dehumidifier will bring in the outdoor air when the HVAC system calls for heating, cooling, or is running continuous fan. If the amount of set ventilation time has not been met during the HVAC calls, the dehumidifier will open the ventilation damper and turn on the HVAC fan and bring in fresh air until the ventilation time has been met.

High and low temperature limits are available in 3 different modes, preventing outdoor air that is too hot or too cold from being delivered to the home. If the outdoor temperature rises above the high limit or drops below the low limit, ventilation will not occur. If the outdoor temperature drops below the heat only limit, ventilation will be allowed only when the HVAC system is calling for heat. A high indoor %RH limit is also available in all three ventilation modes.

#### ZONED DEHUMIDIFICATION

The 1870 Series dehumidifiers are capable of zoned dehumidification. In this application, the dehumidifier can control the humidity in two separate zones in the home, a Primary and Secondary Zone.

The submittal is intended to show general, overall product dimensions and provide guidance for installation clearance. Drawings are not to scale. Ensure submittals are current. Research Products reserves the rights to make product change without notifications or obligations.