

# AprilAire®

## Dehumidifier

Project: \_\_\_\_\_  
 Architect: \_\_\_\_\_  
 Contractor: \_\_\_\_\_  
 Suppliers: \_\_\_\_\_

### SUBMITTAL SHEET

## Model E100

### Dehumidifier

Dealer: \_\_\_\_\_  
 Engineer: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Date: \_\_\_\_\_

#### SPECIFICATIONS

<b>Capacity<sup>(1)</sup></b>	@ 80°F/60% RH @ 73°F/60% RH	100 ppd 85 ppd
<b>Energy Factor<sup>(1)</sup></b>	@ 80°F/60% RH @ 73°F/60% RH	2.6 L/kW-h 2.35 L/kW-h
<b>Airflow @ varying E.S.P. (external static pressure - dry coil)</b>	0.0" w.c. 0.2" w.c. 0.4" w.c.	280 CFM 245 CFM 210 CFM
<b>Voltage, phase, frequency</b>	120VAC, 1 Phase, 60Hz	
<b>Current draw<sup>(1)</sup></b>	6.9 Amps	
<b>Noise</b>	55 dBA ducted	
<b>Dimensions (cabinet only)<sup>(2)</sup></b>	Width: 14" Height: 15" Length: 26"	
<b>Unit Weight Shipping Weight</b>	64 lbs. 82 lbs.	
<b>Leveling Feet</b>	E100/E100H Only	
<b>Casters</b>	E100C Only	
<b>Control<sup>(3)</sup></b>	Built-in digital control with display	
<b>Control mounting option</b>	Field-interchangeable from top to front	
<b>Cabinet insulation</b>	1/2" EPS	
<b>Air discharge</b>	Top or end	
<b>Inlet/Outlet duct collars</b>	10" dia.	
<b>Backdraft damper at outlet</b>	Included	
<b>Filter</b>	Washable MERV 8 (Part Number 5881)	
<b>Refrigerant</b>	R410A	
<b>Coil type</b>	Corrosion-resistant aluminum	
<b>8' Power cord<sup>(4)</sup></b>	Plug type (E100, E100C only)	
<b>Hardwire option</b>	Yes (E100H only)	
<b>Discharge air temperature rise</b>	10°F-30°F	
<b>Drain connection<sup>(5)</sup></b>	3/4" MNPT Threaded	
<b>Included drain tubing</b>	10' length (E100C only)	
<b>Warranty</b>	5 Years	

<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>Height does not include adjustable feet. The width excludes the filter doors and length excludes the duct collars.

<sup>(3)</sup>Built-in automatic control capable to be set up for dehumidification and ventilation or zoning.

<sup>(4)</sup>Model E100H is a hardwired unit and doesn't ship with a power cord.

<sup>(5)</sup>Threaded barbed fitting included.



**E-series**

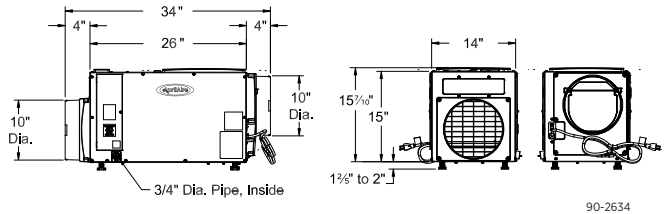


#### MODELS:

**E100:** Includes 8' power cord

**E100C:** Uses casters instead of leveling feet

**E100H:** Terminal connection for hardwiring



#### OPERATION

The AprilAire E100 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 E100 Dehumidifiers are the perfect product for whole-home dehumidification, basements, crawl spaces and sealed attics.

#### VENTILATION

All E100 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, Energy Star, and 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 E100 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. AprilAire reserves the right to make product changes without notification or obligation.**



**5-year warranty on all installed products**

(warranty does not apply to filters)

Designed & Assembled in the USA

utilizing U.S. and Global Components