

AprilAire® Ventilation

SUBMITTAL SHEET

Models 8145/8145NC

Fresh Air Ventilator with Power Damper and Filter

Project: _____

Dealer: _____

Architect: _____

Engineer: _____

Contractor: _____

Location: _____

Suppliers: _____

Date: _____



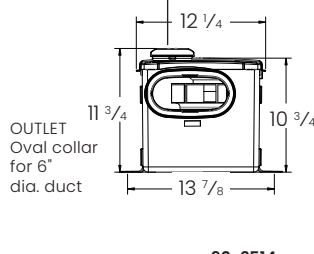
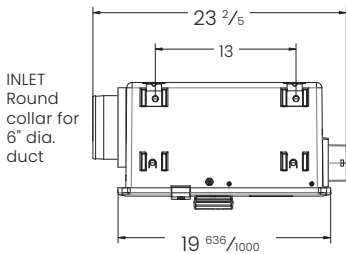
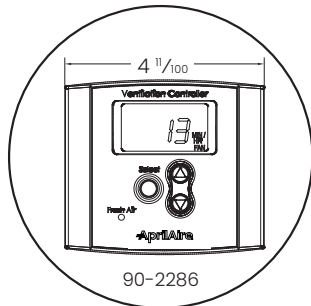
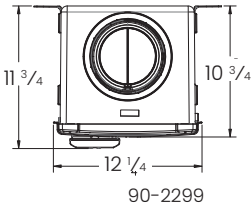
8145



8145NC

GENERAL DESCRIPTION

- Model 8145 improves indoor air quality by bringing the precise amount of outdoor air into tight homes and complies with ASHRAE Standard 62.2.
- Optimize energy savings by locking out ventilation during hottest/coldest times of the day. Built in control automatically compensates for the ventilation time that is missed by bringing in additional fresh outdoor air when temperatures are more moderate, improving indoor air quality (IAQ).*†
- Motor 55 watts; 0.5 amps (FLA) @ 115v/LPH/60Hz
- Control is integrated into the Model 8145 Ventilator. The Model 8145NC has no integrated control so the ventilator can be hardwired to the HVAC system and controlled from within the living space.
- Control provides the capability to adjust the high/low outdoor temperature limits and indoor RH limits
- 6-foot power cord with a standard 5-15P plug provided with unit
- 24-volt wiring to HVAC system. Furnace or air handler does not require an EC motor to qualify to meet the ventilation efficiency requirements of Energy Star for homes, or 2012 - 2018 International Energy Code
- Integrated powered damper and removable, washable MERV 6 filter. Replacement MERV 13 filter available.
- For indoor use only; Installation temperature up to 140°F
- Duct collars accept 6" duct
- ETL listed
- Designed and assembled in the USA utilizing US and global components



When properly installed and set, it will meet the following mechanical ventilation requirements:**

- ASHRAE Standard 62.2
- Energy Star for Homes
- EPA Indoor airPLUS
- International Residential Code (IRC)
- International Energy Conservation Code (IECC)
- California Energy Commission Title 24

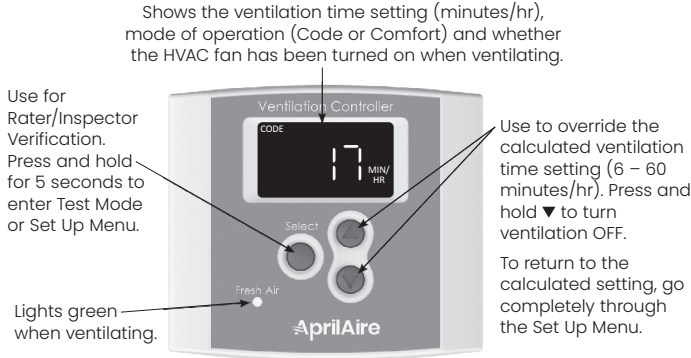
SPECIFICATIONS

External Static Pressure* ("w.c.)	0.0	0.2	0.4	0.6
Airflow (CFM)	210	180	150	120
Efficacy (CFM/watt)	5.2	4.4	3.5	2.8

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.

* Model 8145 only.
 ** 8145NC compliance is subject to the functionality of the external control. To assure compliance, use an 8910, 8910W, 8920W, 8620 or 8620W thermostat or 8120X ventilation controller.
 *** Measured across ventilator.
 † Pat. No. 9,874,366. Applies to all controls listed above.

CONTROLLER INTERFACE



SEQUENCE OF OPERATION – “CODE” SETTING*

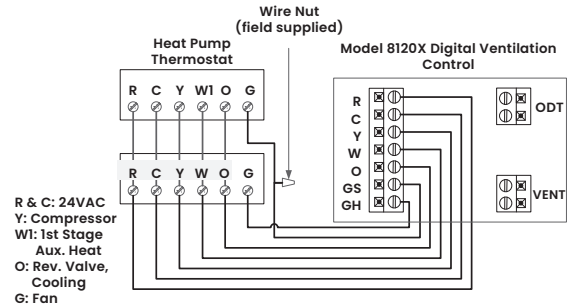
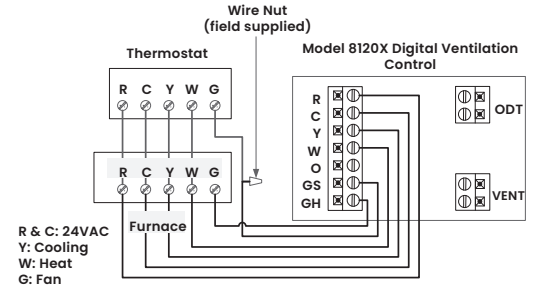
- The control will open the vent damper with a heating, cooling or fan call for the set number of minutes during a one-hour cycle period. If the outdoor temperature is above the high temperature ventilation limit, ventilation will not occur with a cool or fan call, but if it is below the low temperature ventilation limit it will occur with a heat call.
- If the HVAC equipment does not turn on enough to meet the ventilation time within the hour, the control will open the vent damper and turn on the HVAC blower without a call, but only if the outdoor air temperature is within the high and low ventilation temperature limits.
- If the outdoor air temperature is outside of the limits at the end of the one-hour cycle period, then no additional ventilation will occur for another 60 minutes, and the cycle period will automatically adjust to four hours. The controller will then attempt to meet the set amount of ventilation during the four-hour cycle period.
- If the air temperature is still out of range at the end of the four-hour cycle period, the control will automatically switch to an eight-hour cycle period, then a 12-hour cycle period and finally a 24-hour cycle period. During eight, 12 and 24 hour cycle periods, the total ventilation time increases to compensate for ventilation effectiveness as defined in ASHRAE Standard 62.2.
- When the cycle period automatically adjusts to 24-hours, the control will turn on ventilation to meet the requirements even if the temperature is outside of the set limits.

*Pat. No. 9,874,366

SEQUENCE OF OPERATION – “COMFORT” SETTING

- The control will open the vent damper with a heating, cooling or fan call if the outdoor air temperature is within the high and low ventilation temperature limits and the indoor RH is within the high and low RH limits, for the set number of minutes during a one-hour cycle period.
- If the HVAC equipment does not turn on enough to meet the ventilation time within the hour, the control will open the vent damper and turn on the HVAC fan without a call, if the outdoor air temperature and indoor RH is within the set limits. If the outdoor temperature or indoor RH are outside of the set limits, then no ventilation will occur.

WIRING TO HVAC SYSTEM – MODEL 8145 ONLY



WIRING TO CONTROLLERS – MODEL 8145NC ONLY

