

AprilAire®

Ventilation

SPECIFICATION SHEET

Model 8145 & 8145NC

Fresh Air Ventilators

FEATURES

- 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.
- High and low outdoor temperature limit lock-outs while maintaining ASHRAE Standard 62.2 (Model 8145 only)
- High and low indoor relative humidity (RH) limits can be set on the controller (Model 8145 only)
- Patented logic adjusts on-time and cycle time to meet ventilation requirements within set temperature and ranges (Model 8145 only)*
- Integrated powered damper and removable, washable MERV 6 filter. Replacement MERV 13 filter available.



SPECIFICATIONS

Overall Dimensions	12 1/4" W x 11 3/4" H x 23 2/5" L
Weight	15 lbs
Inlet Collar	6" Round
Outlet Collar	6" Oval
Ventilation Setting	Off, 6-60 min/hr Code/Comfort Operation
Ambient Temperature	0°F - 140°F
Outdoor Temperature Limits	Low: -10°F - 40°F High: 85°F - 105°F
Indoor RH Limits	Low: 10 - 30% High: 45 - 70%
Voltage	115VAC, 1 phase, 60 Hz
Power	Includes 6' power cord
Ducting	6" dia. flexible insulated duct
Warranty	5 Years
ETL	Tested to UL Standard 705 Not for outdoor use

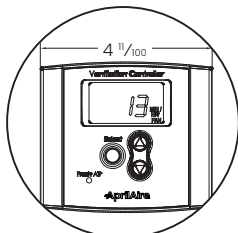
BENEFITS

- Reduces the amount of viruses and contaminants in indoor air bringing in fresh outdoor air
- Lightweight design, snap-on mounting brackets make install quick and easy
- Durable construction withstands jobsite abuse
- Delivers the precise amount of outside air needed in today's efficiently designed homes
- Model 8145 optimizes energy savings by locking out ventilation during hottest/coldest times of the day
- Robust design handles hot attics up to 140°F
- Installation labor reduced, requires only a switched outlet and 24 volt wiring to HVAC system
- Furnace or air handler does not require an ECM to meet efficacy requirement

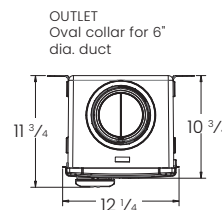
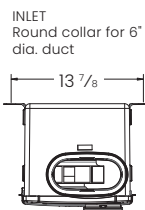
When properly installed and set, the AprilAire Model 8145 will meet the mechanical ventilation requirements of:**

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

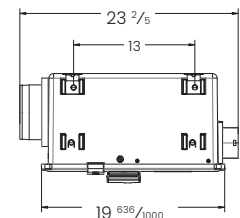
*Pat. No. 9,874,366. Applies to all controls listed below.
**8145NC compliance is subject to the functionality of the external control. To assure compliance, use an 8910, 8910W, 8920W, 8620 or 8620W thermostat or 8120X ventilation controller.



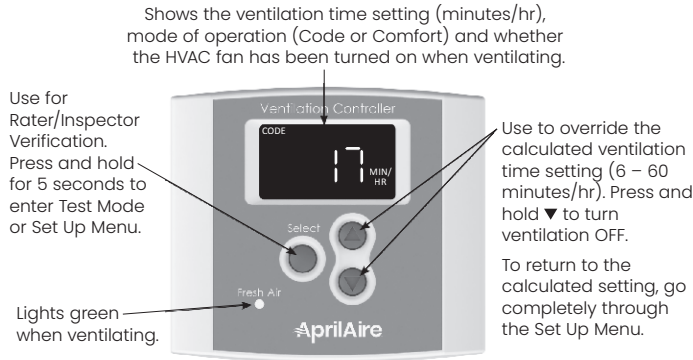
90-2286



90-2299



CONTROLLER INTERFACE



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

*** Measured across ventilator.

SEQUENCE OF OPERATION – “CODE” SETTING*

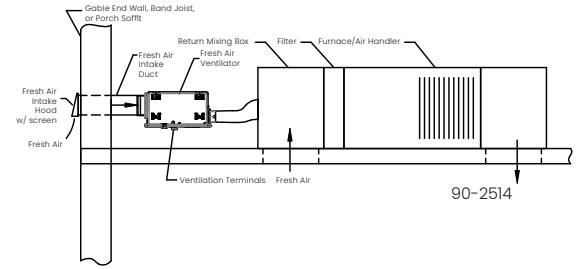
- The control will open the vent damper with a heating, cooling or fan call for the set number of minutes during a one-hour cycle period. If the outdoor temperature is above the high temperature ventilation limit, ventilation will not occur with a cool or fan call, but if it is below the low temperature 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 62.2-2010.*
- 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

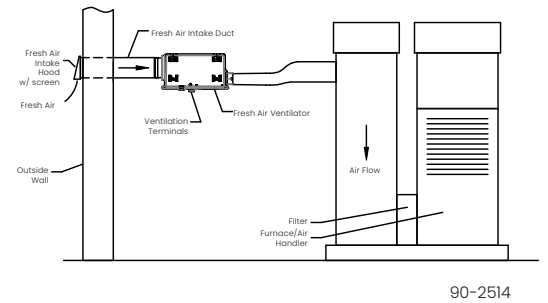
SEQUENCE OF OPERATION – “COMFORT” SETTING

- 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.

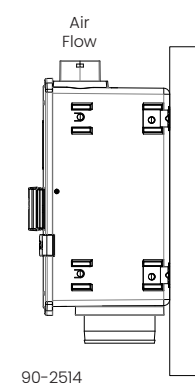
TYPICAL ATTIC INSTALLATION



TYPICAL BASEMENT INSTALLATION



MOUNTED TO THE WALL



MOUNTED TO THE JOIST

