



Alpha Aire

**Dedicated Outdoor Air System, VAV,
Air-Source Heat Pump with Energy Recovery**



- All Indoor Installation
- One Size Fits All
- 100 to 500 CFM
- Air-Source Heat Pump
- Variable Air Volume
- Air-Cooled Self Contained
- Direct Expansion
w/ Energy Recovery

Unique Solutions for All-Indoor HVAC Projects

Let the Fresh Air In!



The Newest All-Indoor Solution by United CoolAir

Indoor air quality can be adversely affected by many factors. Indoor pollutants can lead to a variety of health risks, especially for those already susceptible to such factors. Studies show that introducing conditioned outside air can lead to better health and per-

formance of occupants in a variety of settings. ASHRAE 62.1-2016 requires minimum OSA per code. Alpha Aire is the first choice in introducing fresh air into buildings for a simple and quick installation for challenging or existing retrofit applications.

Alpha Aire Features & Options

United CoolAir uses high-density **2" thermal/acoustic insulation Solid Double Wall** along with low airflow to greatly reduce noise for near occupant operation. Critical components are isolated out of the air stream for longer life, and thermal

breaks prevent unwanted condensate formation. Single point electrical power and 8" flex duct make for a low cost installation. The sheet metal is G90 galvanized steel with optional wet paint finish for durability and long life.

FEATURES

- Single cabinet design
- 2" Solid double wall
- Self contained DX system
- Dual Energy recovery Devices
- Auxiliary Reheat Coil
- Variable Air Volume Capable (Through BMS)
- Up to 1" of ESP
- Heat pump
- Field convertible return/supply air panel
- Stainless steel drain pans
- 2" Merv 8 pleated throwaway filters
- 208/230-1 power
- ECM fans
- 100–500 CFM

OPTIONS

- Painted cabinet (Wet paint)
- Non-fused disconnect
- Coated Coils
- Buck Boost Transformer
- External condensate pump
- 4" MERV 11 or 13 filters
- Smoke detector
- Occupancy switch
- VOC switch
- CO₂ switch
- Floor Stand
- Trap/Switch Combo

VENTILATION RATES PER ASHRAE 62.1-2016 *

Based on TABLE 6.2.2.1 Minimum Ventilation Rates in Breathing Zone

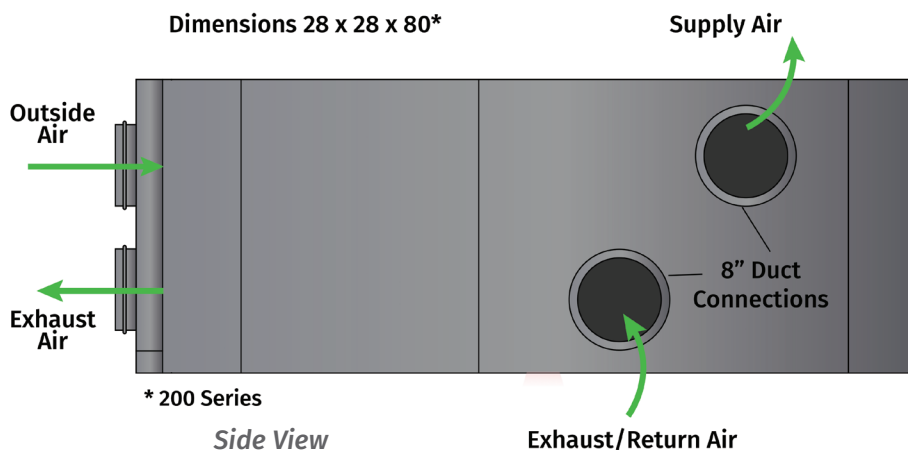
Occupancy Category	CFM/Person	Occupancy Category	CFM/Person
■ Art Classroom	10	■ Lecture Room	7.5
■ Bank or Bank Lobbies	7.5	■ Legislative Chambers	5
■ Bar/Cocktail Lounge	7.5	■ Libraries	5
■ Beauty and Nail Salon	20	■ Lobby/Pre-function	7.5
■ Bowling Alley	10	■ Museum	7.5
■ Break Room	5	■ Music/Theater/Dance	10
■ Cafeteria/Fast Food Dining Room	7.5	■ Office Space	5
■ Conference/Meeting Room	5	■ Pet Shop	7.5
■ Correctional Facilities	5	■ Pharmacy (prep area)	5
■ Courtroom	5	■ Places of Worship	5
■ Daycare/Classrooms	10	■ Reception Area	5
■ Gambling Casino	7.5	■ Restaurant Dining Room	7.5
■ Health Club/Aerobics	20	■ Retail Store	7.5
■ Hotel Room	5	■ Science Lab	10
■ Laundry Room	5	■ Super Market	7.5

* See ASHRAE standard 62.1-2016 for complete standards and definition.

The Final Word in Low CFM Outside Air Systems

Today's commercial buildings are designed and built with energy efficiency in mind. New construction techniques and materials used for the shell of the building minimize heat gains and losses and prevent the unwanted infiltration of moisture-laden outside air from entering the space, thereby decreasing the cost of space conditioning.

To maintain the latest ASHRAE Standard 62.1-2016 ventilation requirements, owners/operators of commercial buildings generally have to depend on up-sized packaged rooftop HVAC systems not only to condition the recirculating air but to also bring in fresh OA to meet IAQ requirements. This results in larger equipment investments and higher operating costs.



The Solution is Alpha Aire

A simpler, more effective solution is a 100% dedicated outside air system (DOAS) from United CoolAir Corporation working in conjunction with a space sensible heating/cooling system. United CoolAir Corporation's Alpha Aire 100% outside air unit is a stand-alone system designed to meet the OA requirements for today and years to come.

Traditional HVAC systems are designed primarily to handle design sensible loads and are not adequately designed for the high latent loads produced by outside air. The Alpha Aire is designed to exclusively handle the large latent ventilation load and deliver "neutral" air of 72°F to 75°F @ 50% RH. Alpha Aire's supply air dew point design temperature is lower than standard air conditioners to remove the maximum amount of moisture before delivery to the space.

Divide and Conquer

By separating the sensible load from the latent load, the Alpha Aire removes the moisture from its primary source—fresh outdoor ventilation air—at the lowest cost. Alpha Aire can further assist the main space condi-

tioning unit by handling some of the smaller internally generated amounts of latent and sensible loads that naturally build from occupants and other sources. The result is better IAQ at a lower cost!

Unique Solutions for All-Indoor HVAC Projects



VertiCool Classic
Vertical, 3 - 30 Ton



VertiCool Aurora
Vertical, 3 - 35 Tons



VariCool®
VAV, 9 - 70 Tons



VariCool® EZ-Fit
VAV, 12 - 90 Tons



Alpha Aire
100 - 500 CFM



Portable Cooling and Heating Units
3-30 Tons



C13-Series Horizontal
2 - 10 Tons



C-Series Horizontal
1 - 15 Tons
Special Configuration
Engineered to Order



OmegaAir Horizontal and Vertical
100% Outside Air
150 - 3000 CFM

Authorized Distributor:



LIMITED WARRANTY

United CoolAir Units are backed by a 1 year limited warranty on parts and a 5 year limited warranty on the compressor (labor not included). Maintenance items such as filters and belts are excluded under this limited warranty.

FACTORY TESTED

All units are functionally run tested before shipment to ensure a trouble-free start-up and unit commissioning. Industry proven components are used throughout to enhance system reliability and peace of mind.



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 **UNITED
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All-Indoor Solutions

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