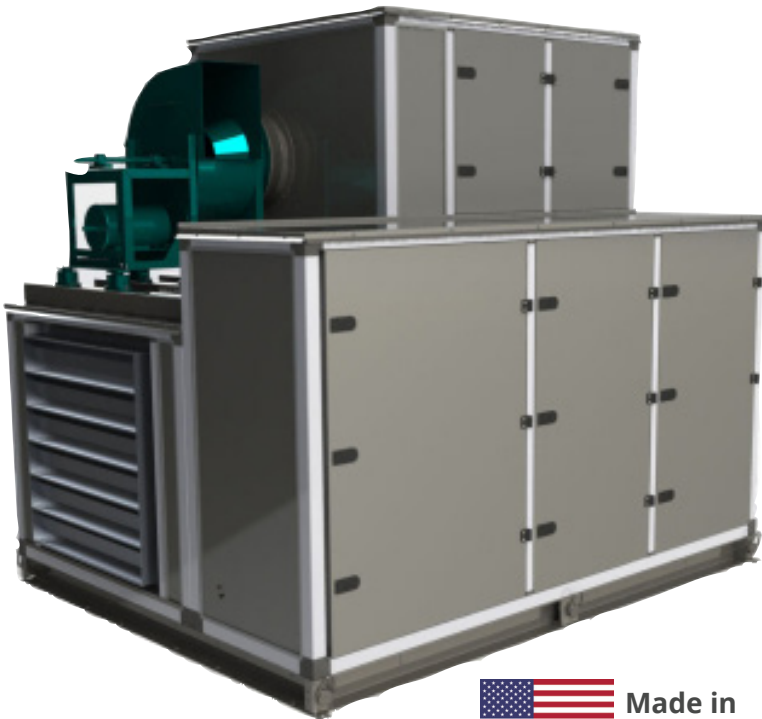


Heat Recovery Ventilation Units FreshAIR Series



**Made in
the USA**

KEY FEATURES

- Capacities from 2,000 – 50,000 CFM
- Active air-source heat recovery
- Integrated control PLC
- Semi hermetic reciprocating compressors
- Dual independent refrigerant circuits
- R-134a refrigerant
- Stainless steel drain pans
- Backward inclined heavy duty blowers
- Hinged/removable doors requiring no tools
- Aluminum frame construction
- Welded SS base frame with forklift holes
- MERV-5 through 20 pleated air filtration
- Elastomeric foam insulation

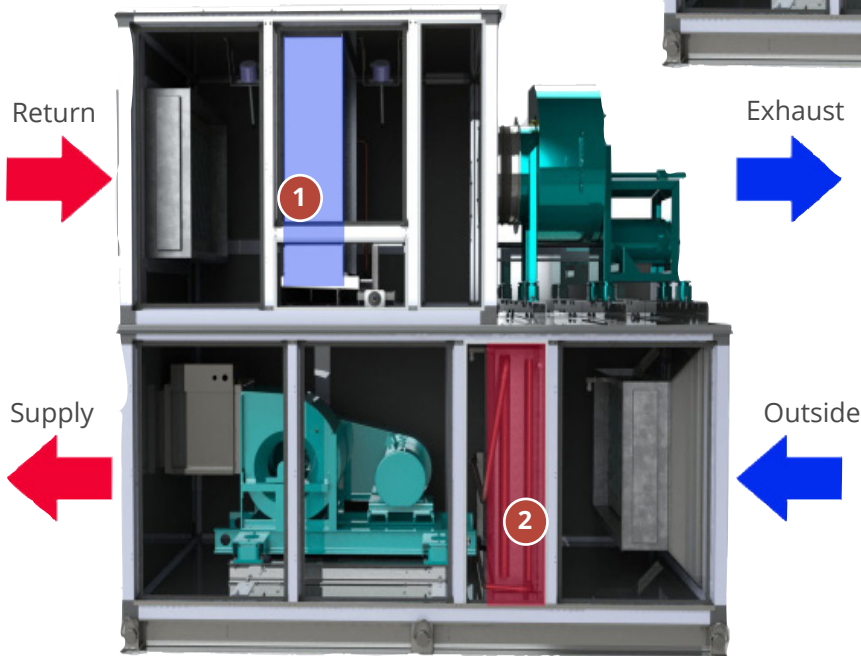
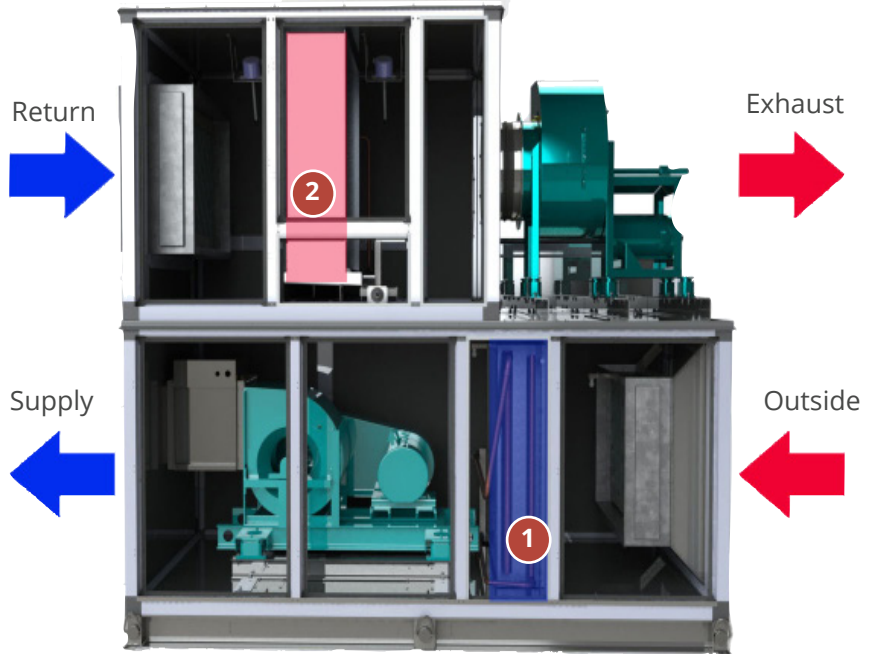
PRODUCT INFORMATION

FreshAIR is a heat recovery ventilation unit that uses the principle of refrigeration to heat or cool ventilation air using exhaust air as a heat sink or source. Since exhaust air temperatures are typically cooler than ambient air temperatures in the summer, the efficiency of FreshAIR can exceed that of a conventional air-cooled system. In winter months, FreshAIR can achieve a COP greater than 5, making it more cost efficient than heat derived from fossil fuels. Both exhaust and supply air streams remain completely isolated, making it an ideal system for recovering energy from contaminated exhaust air.

HOW IT WORKS

Cooling mode

1. The compressor extracts heat from the evaporator and cools the supply air
2. Heat is rejected to the exhaust air through the condenser



Heating mode

1. Heat is extracted from the evaporator in the exhaust air
2. The compressor upgrades the heat and rejects it to the supply air through the condenser

COP with -4°F entering air = 4.5
 COP with 32°F entering air = 7.8
 Annual compressor electrical consumption = 7,972 kW.hr or \$956*
 Equivalent 80% efficient natural gas fired unit, \$7,555 m³. or \$ 2,266*

*Performance stated per 1,000 CFM of air flow. - 4°F design entering air conditions, constant 70°F supply air temperature, \$0.12 / kW.hr and \$0.30 / m³.

Heat Recovery Ventilation Unit FreshAIR Series

ADDITIONAL CONFIGURATIONS

- Water or ground source option
- Custom layout and dimensions
- Indoor or outdoor roof mounted
- Remote condenser / evaporator

OPTIONAL FEATURES

- Stainless steel panel construction
- Coil coatings i.e. E-Coat, Blygold etc.
- Discharge temperature up to 160°F
- Explosion proof construction
- Variable speed compressors
- Variable speed fan motors
- Air-flow monitoring stations
- 208-230V / 460V / 575V
- Remote touch-screen control panel
- Remote monitoring with AIRbot
- Start-up assistance
- Turnkey installation

SERVICE FRIENDLY

1. Cabinet doors removable for service, without tools.
2. Electrical box positioned for easy access.
3. Serviceable compressors for industrial reliability.
4. Replaceable filter drier with isolation service valves.



Other AIR products:



Wall mounted units



Fan coils



Industrial a/c units



Condensing units



Custom designs

ABOUT AIR

Advance Industrial Refrigeration is a part of the Advance Industrial Group which has been in business since 1993. The group includes:

- Advance Industrial Maintenance and Machine (AIMM)
- Advance Industrial Automation (AIA)
- Advance Industrial Refrigeration (AIR)

All businesses are owned by the same family, who pride themselves on quality services and products. The Advance Industrial family of companies have a very close relationship and partner to support each other in all applicable business transactions.



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Other AIR products:



Water cooled chillers



Air cooled chillers



Chilled water air handlers



Modular chillers

