CAR-SERIES

Custom Air Recirculation Units
For Whole Building Air Capture Filtering and Ventilating

Weld Smoke • Oil Mist Removal • Industrial, Agricultural Fine Powder
Plasma or Laser Metal Cutting • Dust Collection
Metal Grinding • Pharmaceutical Storage

According to a mechanical contractor,
“One of the best ways to capture smoke and dust in a large, flexible manufacturing facility.”

Helps buildings meet ASHRAE 62.1 Ventilation for Acceptable Indoor Air Quality by providing better air quality and comfort using filtration without the high cost of ventilation exhaust.

- **Air Quality and Comfort** - Indoor air is filtered and recirculated while introducing fresh outdoor air into the space for pressurization.
- **Improved Processes** – Contaminants within the space are filtered for a cleaner, more productive work environment.
- **Energy Saving** - Clean, recirculated air is delivered into the space helping eliminate the need for costly exhaust.
- **Complete Air Management Solution** - Integrate filtering, building pressurization, fresh outdoor air and heating and/or cooling into one, custom engineered package.

- **Cost Saving** - Reduces installation time, ductwork materials and labor costs and can eliminate the need for a separate HVAC system.
- **Environmentally Friendly** – Building exhaust air configured units filter air before releasing it into the environment to help reduce pollution.
- **Versatile** – Used for whole building or ducted air capture while simultaneously providing heating and/or cooling to satisfy customer needs.

**1.800.589.3691**
www.weather-rite.com
WEATHER-RITE™ Building Air Capture Systems

How does it work?

WEATHER-RITE™ Building Air Capture Systems are designed to help provide improved air quality without the high cost of ventilation by combining our make-up air systems with high efficiency filtration.

Excess dust, smoke or oil laden air (within facility) is recirculated through cartridge filters (99.9% plus efficiency) on particles down to .05 micron. WEATHER-RITE™ CAR-Series systems with integrated heating and/or cooling can help maintain facility temperatures, while supplying fresh, clean air and maintaining a slightly positive building pressure.

Filtering dust, smoke or oil can promote a cleaner, healthier work environment, reduced operating cost and improved productivity.

Ultra High Efficiency Cartridge Filtration
Proper removal of dust and smoke from a facility utilizes high efficient filtration methods in combination with dust collection and make-up air technologies. Recirculated air through high efficient cartridge filters removes particles down to .05 micron.

Oil Mist Filtration
Due to the hazardous nature of oil mist within a facility, filtration is essential. Filtration can improve manufacturing processes and promote a safe, clean work environment helping increase worker comfort and productivity.

Filtration for Exhaust
Exhaust extracted from a building to atmosphere must comply with EPA (Environmental Protection Agency) regulations and local ordinances. Air handlers configured with building exhaust filtration option, filter exhaust air to minimize contaminants, promoting a cleaner environment and helping reduce pollution.
**WEATHER-RITE™ CAR-Series Benefits**

**Cleaner Air**
Fresh outdoor air helps provide building pressurization while return air is filtered before recirculating back into the space.

**Reduced Filter Maintenance**
Self-cleaning cartridge filters (based on application) can have up to five year life expectancy or more compared to replacement of costly and time consuming traditional make-up air filters.

**Energy Efficient**
Recirculates facility air without exhaust, and helps provide free cooling with economizer capability.

**Environmentally Friendly**
Exhaust air is filtered helping to comply with EPA (Environmental Protection Agency) regulations, reduce pollution and potential complaints from neighboring facilities and nearby residents.

**Reduced Infiltration**
Maintaining a slightly positive pressurized facility helps prevent infiltration of untreated air and unwanted dust particles, increasing productivity and employee comfort.

**Lower Total Installed Equipment Cost**
Air handler customization can combine make-up air systems and varying levels of filtration to provide economical total building capture, helping eliminate the need for multiple HVAC systems, reducing equipment cost compared to source capture systems.

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### Cartridge Filter Array Sizes

Available in vertical or horizontal configurations. Contact factory for oil mist filtration.

* Filtration (Recirculation) CFM based on 2.5 FPM filtration velocity (2.5:1 air to media ratio with 263 ft² cartridge). Unit capacity will be different based on other air to media ratios. Contact factory for oil mist filtration.

** Assumes 20% outside air. If no outside air, total CFM equals filtration CFM. Higher levels of outside air are available for a given model size.

*** Horizontal configuration only.

† Larger sizes available on request.

<table>
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<th>Model</th>
<th>Cartridge Quantity</th>
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<th>Maximum Filtration CFM*</th>
<th>Total CFM** with 20% Outside Air</th>
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(Contact factory for custom sizes)
WEATHER-RITE™ CAR-Series Features

Long Lasting Construction Provided by:
- Sturdy, integral frame welded together for durability and longer service life
- Heavy-duty, painted frame with corrosion resistant, galvanized steel or painted casing
- Heavy-duty, factory-installed motor and drive package
- Heavy-duty, pre-lubricated bearings
- Double wall construction using 2" insulation
- Pitched roof

Control Options:
- Remote station with discharge or space temperature control
- Night setback thermostat with time clock operation
- Flame failure and clogged filter indicators
- Unit-mounted on/off toggle switch
- UL label on control panel
- Flexible custom controls options including DDC, and PLC controls

Optional Features

Filters:
- Oil Mist Removal
- Pleated-panel Polyester
- Flat-panel Polyester
- Cartridge
- Bag
- High Efficiency
- Charcoal

Cooling / Dehumidification:
- Chilled Water
- Direct Expansion (DX)
- Economized Air (Free Cooling)

Heating:
- Direct-Fired
- Indirect-Fired
- Steam
- Hot Water
- Electric

Humidification:
- Steam
- Water Mist

Discharge Orientation:
- Downblast
- Horizontal
- Upblast
- Side

Fans:
- Forward Curved
- Backward Curved
- Airfoil
- Plenum

Other:
- Vestibule
- Low Leak Dampers
- Energy Recovery

Flexible Designs to Meet Customers’ Needs

This product is not for residential use.
This document is intended to assist licensed professionals in the exercise of their professional judgment.

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