

Greenheck remote panels offer a convenient and attractive option for controlling and monitoring energy recovery ventilators. A variety of indicator lights, switches and time devices are available to be mounted to a stainless steel face plate.

Field wiring is only required from the remote panel to a low voltage terminal strip in the control center of the energy recovery ventilator. A junction box is included with the remote panel.

Two of the many remote panel configurations are shown. Customize your remote panel with the options listed below.



Lights

- Dirty Supply Filter
- Dirty Exhaust Filter
- Unit On/Off
- Economizer *: Indicates when "free cooling" conditions are present.
- Rotation Sensor: Indicates when the energy wheel is not rotating.
- Frost Control **: Indicates when frost control is activated.

* Refer to the ERV catalog for details on the outdoor air sensors to be used in conjunction with the economizer indicator light. An enthalpy sensor or temperature sensor must be selected with the economizer indicator light.

** Consult the ERV catalog for details on preheat, timed exhaust, and modulating frost control options.

Switches

Two Position

- Unit On/Off: Controls start and stop of the entire unit.

Three Position

- Hand/Off/Automatic: Three way switch operates as an override to allow the unit to be turned on, off, or operated automatically by the building controls.

Time Devices

7-Day Time Clock

A programmable digital 7-day time clock automates start/stop control of the energy recovery ventilators. It is easily programmed to energize the ERV when the space is occupied and shut down the unit when the space is unoccupied.



Time Delay Override

The time delay override is used in conjunction with the 7-day time clock. This option allows the operator to override the 7-day time clock when it has turned the ERV off. The override period is manually set for up to two hours.



Demand Control Ventilation

Demand control ventilation practices may be desirable for applications with widely varying outdoor air requirements such as, auditoriums, theaters and gymnasiums. The ventilation system must be sized for the maximum occupancy, however, there may be a considerable number of operating hours when less outdoor air is required.

In these cases, the Greenheck demand control ventilation option is a simple, reliable and cost effective solution that helps reduce energy bills and provides a better indoor climate.

CO₂ Sensor

The heart of the demand control ventilation system is a CO₂ sensor which monitors the carbon dioxide levels in the building. The sensor may be factory installed in the exhaust air stream or shipped loose for field mounting in the occupied space.

The sensor displays the CO₂ content in parts per million. The CO₂ setpoint is field adjustable.



Ventilation Control Options

Greenheck offers two methods of controlling the ventilation rates. Each method controls outdoor air and exhaust air fans simultaneously.

• **Set Point Control**

The CO₂ sensor controls high and low speeds (1/2 or 1/3 reduction) via inputs to factory installed and programmed variable frequency drive (VFD). When the CO₂ levels in the space are below the field adjustable set point, the VFDs will switch to low speed. When the CO₂ levels in the space are above the set point, the VFDs will switch to high speed.

• **Proportional Control**

Using a 0-10V signal, the CO₂ sensor modulates VFDs that continuously vary the speed of the supply and exhaust fans. Outdoor air volumes are controlled to maintain CO₂ levels within the desired range.

Additional Energy Recovery Products offered by Greenheck



Model APEX

The Model APEX is designed for energy recovery applications requiring up to 20,000 cfm. Supplemental heating and cooling is available.



MiniVent

The MiniVent energy recovery ventilator is designed for applications requiring 300-750 cfm. The unit is designed for floor mount, wall mount or hanging from the ceiling.



Model ERT

Combines the benefits of the energy wheel and a wrap around heatpipe with supplemental heating and cooling.

As a result of our commitment to continuous improvement, Greenheck reserves the right to change specifications without notice.