



Building Performance Equipment, Inc.®

Sustainable, Reliable, and Energy Efficient Ventilation Systems



LOCATION

**Jim Saxton Community
Center Ventilation System
Trenton, NJ**

Challenge

Located in the heart of the United Communities development on McGuire Air Force Base, the Jim Saxton Community Center serves to commemorate 15 years of service given by New Jersey's former 3rd District Congressman. Equipped with a computer lab (which contains a live video chat system for communications during deployment), exercise room, day care, dining room, conference room, kitchen, and backyard playground, this center serves as the backbone to a community of United States officers, airmen, and their families.

Such versatility is also the building's largest challenge. Designing a ventilation system that can meet the requirements of drastically different interior spaces can be very difficult. In addition, because of the new 'green' initiatives set by the federal administration, the design had to be extremely energy efficient and environmentally friendly.

(continued)





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Solutions

The solution was to install two (2) BPE-MIR-XE 2000 Energy Recovery Ventilators with four (4) high-efficiency and 100% speed controllable FKD-14 fans.

In combination with a high efficiency Carrier split system, thermal comfort and indoor air quality just got a lot more inexpensive! Families and friends will eat, drink, play, and exercise in an environment worthy of American troops.

Fan speed controls provide even more energy savings. As occupancy changes within the day care, exercise room, or dining room, outdoor air can be increased or decreased with the turn of a knob (see images below). Each fan has its own controller, allowing the staff to control building pressurization. Building pressurization is vital to control during the change of seasons in order to save energy and reduce operating costs.

Thermal comfort and great indoor air quality have never been easier and more efficient!

100% Speed Controllable Fans and Controls allow occupants and the United Communities staff to balance and optimize ventilation as required. Controls provide the capability to adjust pressurization as well.

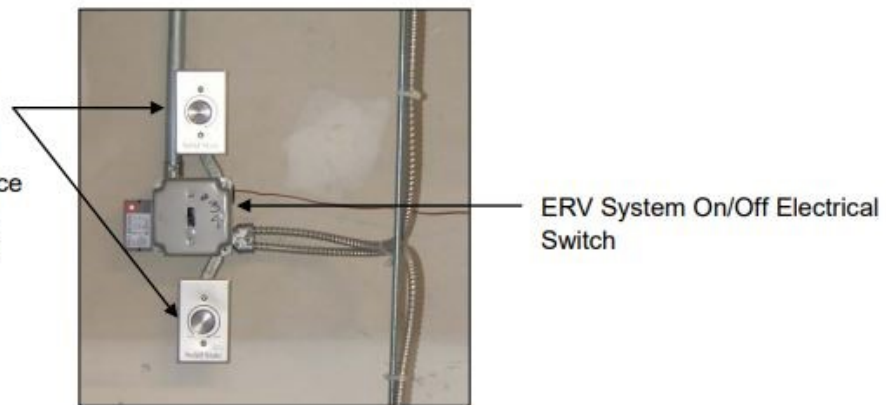


Fig. 1 – Manual ERV Fan Controls



Fig. 2 – High-Efficiency Carrier split system



Fig. 3 – Exhaust and Intake louvres for ERV