



Building Performance Equipment, Inc.®

Sustainable, Reliable, and Energy Efficient Ventilation Systems



LOCATION

**Woodstock Infusions
Pilates & Hot Yoga Studio**
Woodstock, NY

Challenge

Located amid the mountains of Woodstock, NY, at the edge of the Sawkill River, the new Woodstock Infusions Pilates and Hot Yoga studio was taking shape. You can't just run hot yoga classes in any old room, though. The heat, important for warming muscles and sweating out toxins, can create air quality rife with toxins and poor oxygen levels. Without a high-efficiency means of frequently expelling stale air and bringing in fresh, a hot yoga studio could become an unhealthy environment—certainly not what owners Marc Baumslag and Kim Rice wanted for their clients.

Size wise, with 11-foot-high ceilings and a volume of 3,200 cubic feet, the 300-square-foot space required a unique HVAC solution that could accommodate 12-inch ductwork. Given the meditative environment, Marc was also looking for a system that could run super quietly. Cost-effectiveness, of course, was another factor when searching for mechanical ventilation equipment that could meet all those goals.



Solutions

The answer lay in a BPE-XE-MIR-2000 energy recovery ventilator (ERV) capable of air exchanges up to 2,000 cfm. Two BPE T-12 fans were set in-line to send out the used air and pull in the fresh. Thanks to higher rates of thermal efficiency (70% to 90%+), it's easy to keep the studio at the desired temperature.

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Due to the size and build of the space, set-up was a bit of a challenge compared to more traditional installations. BPE CEO, Klas Haglid, P.E., R.A., made the trip up to work with Marc, the project's contractor, and an electrician. The addition of silencers made an already quiet system even quieter—an important quality in an environment dedicated to focus.

The resulting rapid air exchange will provide Woodstock Infusions clients with new, fresh air every 1.5 minutes—much of that air coming straight off a flowing river.



Since people who share a space exhale CO², meter readings can reflect the amount of rebreathing they do. Healthy CO² readings indoors run 400 – 1,000 ppm. The higher the reading, the higher the risk of breathing in toxins, pathogens, and viruses.

In preparation for opening day, the owners ran practice classes which reported an excellent hot yoga workout environment with low CO² readings. The clients who sign-up for classes upon opening will know their health is this business' priority.