

- SOLUTION BRIEF

Ultra-Efficient and Smart Family of Ventilation Solutions Supplying Superior Air Quality

Highlights

- The only Passive House certified commercial ERV, and one of the few certified HRV, in N.A.
- Purpose-built to meet stringent efficiency requirements for the greatest energy savings
- Realize up to 93% recovery efficiency from highly-engineered design and quality components
- Reduce HVAC energy up to 85%, with simultaneous reduction of heating and cooling loads on other equipment
- Service customer better with Ventacity's Smarter Building Platform, providing diagnostics that remotely monitor and analyze your ventilation solutions
- Provide healthy and comfortable environment for occupants with the highest quality filters and automatic response to CO2 level and room temperature

Benefits

Improved health and comfort

- Enhanced occupant satisfaction and worker productivity

Ultra-efficient solution

- Passive House Institute Certified Component for commercial
- Reduce energy use intensity (EUI) by 75% and more
- Quiet operation
- Small footprint

Reduce operational costs required to deliver service

- Drop-in plug and play design
- Easy to install
- Easy to operate

Remotely monitor and analyze your complete HVAC solution

- Increase efficiency
- Easy to integrate with auto-connect and plug and play design
- Proactively address potential failures before occupants are impacted
- Deliver better service to tenants with improved diagnostics



Increase buildings' health, comfort and efficiency, while reducing HVAC energy, with a complete family of ultra high-efficiency, fully featured ERVs and HRVs. With Ventacity you have the ability to remotely monitor and analyze your ventilation solutions for better performance, lower maintenance costs and greater operational efficiency.

“Until recently, such very high-efficiency HRV/ERV systems have not been available in North America for small and medium-sized commercial buildings, but they are now.”

- Charlie Stephens,
Retired Senior Codes & Standards Engineer, NEEA

Your Challenges

Ventilation is a key contributor to the health of a building's environment. In addition to reducing the impact of germs, viruses, mold, dust, dirt and odors on indoor populations, it also ensures that air moisture levels are appropriate for the location – preventing mold in some climates while promoting seasonal humidity in others.



Your Challenges

In addition to bringing fresh air into enclosed environments in order to maintain healthy levels of CO₂, ventilation can also affect workplace productivity. In fact a recent study found, on average, a 400 ppm increase in CO₂ was associated with a 21% decrease in cognitive function scores.

Proper ventilation can contribute to increased performance:

- A 70-school study in the Southwestern US demonstrated that students' mean mathematics scores were increased by 0.5% per 2 cfm/person increase in ventilation rate within the range of 2 – 15 cfm
- A 54-school study across the US demonstrated that math and reading scores were 14% higher when VRs were greater than 10 cfm/student compared to scores when VRs were less than 5 cfm/student

On the other hand, poor ventilation considerably degrades the health of indoor populations:

- A study of 168 California classrooms demonstrated that increasing classroom VRs

from the California average (8.5 cfm per person) to the state standard of 15 cfm would decrease illness absences by 3.4%

- A Washington and Idaho study of 434 classrooms showed that a 1000 PPM increase in CO₂ was associated with a 10% - 20% increase in student absence

Ventilation can significantly reduce the concentration of VOCs and their toxicity on indoor populations while contributing to greater productivity:

<https://www.buildinggreen.com/newsbrief/air-filtration-schools-may-improve-test-scores>

Our Solution

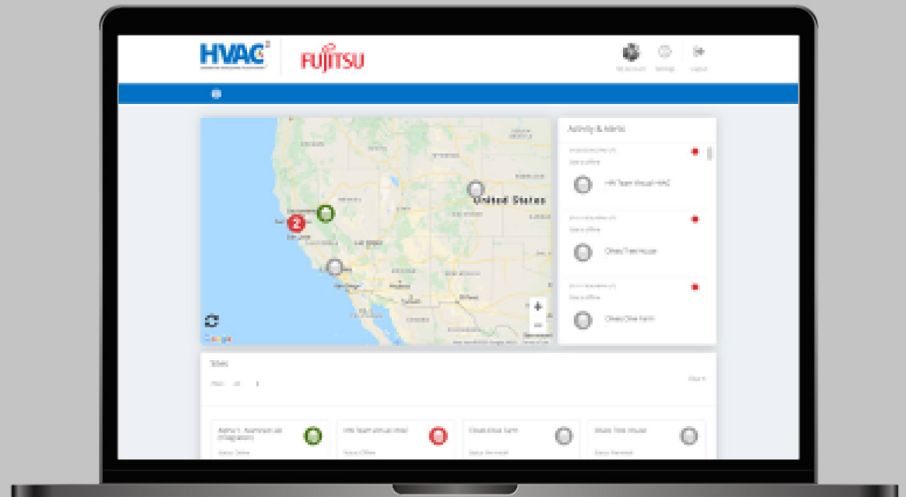
Ventacity offers a complete portfolio of ultra-efficient ventilation systems that support superior air quality while also providing energy recovery. Our best-in-class heat and energy recovery ventilation systems are designed for easy installation, energy savings, and durability.

Our solution is ideal for high performance green buildings and those that seek to be 100% electric. With a complete line of rooftop units, ceiling mount units and whisper-quiet ductless units that come in both heat recovery and energy recovery models, Ventacity enhances building health, comfort and efficiency while reducing HVAC energy, operation and maintenance

costs by as much as 85% (See airport case study link here) <https://betterbricks.com/case-studies/innovative-hvac-approach-helps-airports-energy-savings-take-off>

We have built our product on a solid foundation of the highest standards, designs and components available on the market today.

Complete Family of Ultra-Efficient, Fully Featured ERV & HRV Solutions



Ventacity's portfolio of energy solutions includes VHE HRVs and ERVs, with counterflow heat exchange, ECM motors, and advanced controls. In addition, all devices can be managed on our smart platform to simplify operations and improve visibility.

Rooftop Units

Rooftop units have a rugged design for easy rooftop installation and are also ideal for mechanical room installation. Their design and features make these unit perfect for various commercial applications, such as retail, office, public spaces, schools and multifamily residential buildings.

Ceiling Mount Units

Ventacity's VS-CM Series has a very thin profile and helps building owners and HVAC contractors working on multi-level building projects reduce heating and cooling installation and operating costs while improving energy efficiency, health and comfort. Unlike other ventilation products, the Ventacity VS-CM Series operates at much higher efficiency (up to 86% energy recovery) which saves more energy and significantly lowers operating costs.

Super Quiet Units

The Ventacity VS500 SQ is a ductless HRV/ERV for decentralized installations. Designed with minimal noise and nearly draft-free airflow, it is the perfect choice for classrooms, conference rooms and other single use spaces. The VS500 SQ provides up to 500 cfm of VHE ventilation while generating a maximum of 35dB of sound.

DX and WATER COILS

Plug and play modules are accessories to ceiling mount units and the VS1000 RT for additional post-heating and -cooling. Hydronic coils are also an integral accessory to the SQ series ventilators.

Smarter Building Platform

Native integration with our ventilation family of products provides automatic commissioning and plug and play operation in the Smarter Building Platform.

Reduce Operational and Energy Costs

Energy efficiency isn't simply smart business, it's essential for today's energy-aware tenants.

Increasing energy efficiency while lowering energy costs has never been more important as you seek opportunities to reduce expenditures while providing tenants with a modern, environmentally conscious experience.

Ventacity tools identify opportunities to save and better manage energy without impacting occupant satisfaction. You not only identify energy savings and

opportunities to increase efficiency, but also eliminate the costs that come from inefficient systems.

At the same time, Ventacity solutions are drop-in plug and play for easy installation, take advantage of touch panels for simple commissioning and ongoing operation, and reduce the costs associated with delivering HVAC services to occupants.

Smarter Building Platform

Our Smarter Building Platform is compatible and automatically recognizes the family of ventilation products.

The Ventacity Smarter Building Platform provides an unparalleled understanding of building usage, operations, and system performance. With the ability to collect and store critical performance data, deliver data to the cloud using a dedicated, secure wireless connection, and analyze and display Key Performance Indicators (KPI) on a web/mobile portal, Ventacity reduces the operational and capital expense required to deliver building services.

Conclusion

Ventacity gives you the power to increase building health, comfort and efficiency with the intelligence that comes from remote monitoring and analysis of your complete HVAC solution. You get the advantages of better performance, lower maintenance and greater operational efficiency and your occupants get the benefits of a healthier and more comfortable environment.

Learn More

With Ventacity, it isn't just about smarter buildings, it's about smarter business. To learn how Ventacity delivers innovative and smart building technology that maximizes the value of your business, visit www.ventacity.com

2828 SW CORBETT AVE
PORTLAND, OR 97201

1-(888)-VENTIL8
1-(888)-836-8458

- SOLUTIONS

Ultra-Efficient Ventilation Solutions



Quiet operation. Ventacity products take advantage of features that deaden sound to ensure quiet operation – our SQ Series of products underwent acoustical testing that resulted in a maximum of 35dB of sound level.



90% sensible efficiency. Ventacity uses larger, true counter-flow heat exchangers engineered for optimum air flow and thermal transfer.



Reduced fan energy. A larger heat exchanger results in lower static pressure through the unit, combined with ultra-efficient variable speed ECM fans. Even more savings with demand control.



Assured reduction of heating and cooling load. Significantly cuts energy usage intensity (EUI) (up to 85%) and operating costs so that air-conditioners and heaters don't have to work as hard.



Pre-cooling and free cooling. Automatic bypass feature ensures the air-conditioner does not have to work as hard, for example when temperatures drop at night, Ventacity brings in more outdoor air that cools building to comfortable temperatures.



Small footprint. In a rooftop environment where every square foot counts, we reduce the requirements for outdoor units or, with our CM products, take ventilation equipment off the roof completely.

The Only Passive House Certified Commercial ERV in US

Passive House certification combines a thorough multi-factor design and performance verification protocol with stringent Quality Assurance and Quality Control procedures performed by certified labs. Ventacity is the only Passive House certified commercial ERV and one of a few certified HRV available in North America.

In addition to being Passive House certified, Ventacity ventilation products are also UL and CSA certified by TÜV-SUD, a third-party, global testing organization on these exacting standards for quality, safety and sustainability.

