enVerid Sorbent Ventilation Technology™ Featured in Daikin Applied's Flagship Rebel Applied Rooftop Heating and Cooling System

Published 09/14/2021

Daikin uses enVerid Systems' award-winning air cleaning technology to enhance indoor air quality and energy efficiency



Daikin Rebel

Applied RTU with enVerid SVT™

Westwood, MA – Sept. 14, 2021 – enVerid Systems, the leader in sustainable indoor air quality (IAQ) solutions, announced today that Daikin Applied has integrated enVerid Sorbent Ventilation Technology™ (SVT™) into the Rebel Applied HVAC rooftop unit — creating a first-of-its-kind packaged air quality system, unveiled today at the 2021 Daikin Group Sales Meeting.

SVT™ is the innovative technology at the core of enVerid's flagship product, the HVAC Load Reduction (HLR) module, an air cleaner that has garnered widespread acclaim as an "industry game changer" for its safe, proven approach to improving IAQ while reducing ventilation energy consumption and HVAC system first costs. enVerid's SVT is designed to capture carbon dioxide, ozone, and over 250 types of volatile organic compounds (VOCs) including formaldehyde. When applied in combination with the ASHRAE 62.1 Indoor Air Quality Procedure (IAQP), SVT not only safely cleans indoor air but also reduces outside air requirements by as much as 80 percent, an important consideration as outside air is increasingly compromised by pollution and wildfire smoke. Using SVT, annual HVAC energy costs can be reduced by up to 40%, substantially lowering a building's energy intensity and carbon emissions.

"Simply bringing in large amounts of outside air to dilute indoor pollutants is not sustainable," said Christian Weeks, CEO of enVerid Systems. "Worse, it's counterproductive when outside air is polluted. The solution is maximizing indoor air cleaning and supplementing with the outside air needed to maintain building pressure. SVT enables this 'clean first' approach and, when combined with Daikin's flagship rooftop unit, delivers better IAQ more efficiently with smaller systems that cost less."

"Rebel Applied has already set the standard for high-performance design and efficiency, pairing unlimited configurability with the lowest lifecycle cost," said Jim Macosko, general manager of applied air handler management at Daikin Applied. "Adding enVerid SVT to this packaged system delivers superior air quality, and the ability to cut energy use and carbon emissions. It changes how buildings can be designed to further both IAQ and decarbonization efforts."

There is growing understanding that exposing students and office workers to building environments that contain high levels of CO₂ generated by people, and volatile organic compounds (VOCs) emitted from building materials and furniture, negatively impacts their productivity and general health. Additionally, relying on outside air to dilute indoor generated contaminants can be counterproductive. According to the American Lung Association's 2021 State of the Air report, over 40% of Americans are breathing unhealthy air, whether from ozone, or particulate matter from pollution or from increasing wildfires. Buildings in areas with poor outside air can deliver healthier indoor air more efficiently with SVT.

enVerid SVT has undergone rigorous testing, including ASHRAE 145.2 single-pass efficiency testing by accredited independent labs. Its sorbent filters have been proven to safely remove all contaminants of concern called out by the U.S. Green Building Council (USGBC) without producing any byproducts.

About enVerid Systems, Inc.

enVerid Systems, the leading provider of sustainable indoor air quality (IAQ) solutions, helps buildings achieve air quality goals, save money and reduce energy consumption and carbon emissions. Its flagship HVAC Load Reduction® (HLR) modules are award-winning air cleaners that deliver up to 40% HVAC energy savings and superior indoor air quality in new and existing buildings. For new HVAC systems, HLR modules also enable immediate capital cost savings. At the core of all HLR modules is enVerid Sorbent Ventilation Technology™ (SVT), uniquely designed to capture gaseous contaminants that degrade indoor environmental quality. enVerid's HEPA air filtration products remove particulate and microorganism contamination, including viruses,from indoor air without the significant cost of upgrading mechanical systems and increasing mechanical ventilation rates. enVerid's products are deployed in commercial, academic, and government buildings globally. Its air cleaning products are ASHRAE Standard 62.1, LEED®, WELL and RESET compliant and eligible for utility rebates. For more information, please visit https://enverid.com.