

Low Sound Condenser Fans

Models RV, RVE, DGX, IGX and MSX

- **Sound power reduction (dBA)**
- **Improved efficiency ratings (EER/IEER)**
- **Reduced electrical loads (MCA/MOP)**
- **Installation flexibility**

Greenheck now offers low sound condenser fans as a standard offering on select packaged energy recovery and make-up air equipment. Condenser fan noise levels can present a challenge with air-cooled packaged equipment installations. If the equipment is too loud, or placed too closely to other buildings, corrective actions are time consuming and costly. Greenheck's low sound condenser fans offer an average sound power reduction of 5-8 decibels when compared to standard condenser fans, resulting in a perceived sound level reduction of up to 50%! An optional electronically commutated motor is also available on models RV and RVE for increased system efficiency, providing additional sound power reduction at part load conditions.



Designed by Nature

The blade shape of the low sound condenser fan was modeled from one of the best - nature! The barn owl is known for its quietness during flight to fly just above their prey, without being detected. That quietness is attributed to their specialized feathers featuring a serrated edge, very similar to the profile of the fan blades in our low sound condenser fans. Although not equivalent to the silent flight of the barn owl, these fan blades produce less noise emissions when compared to standard blades, allowing for more installation flexibility in sound sensitive applications.



Low Sound Example

Scenario: *New construction of downtown conference center and hotel*

Per city code, maximum sound pressure at the property line cannot exceed 45dB. To meet this requirement, air-cooled rooftop ventilation units with traditional condenser fans must be located at least 111 feet from the adjacent property line. At this distance, extensive ductwork is required to deliver the conditioned air to the meeting rooms below. In addition, installed units would be operating close to a rooftop pool where increased equipment noise would not be desirable for guests.

Solution: *Greenheck's low sound condensing fans*

By utilizing Greenheck's new low sound condenser fans, sound is reduced by up to 8dB. The units can now be positioned just 50 feet from the property line instead of 111 feet away and still comply with the 45dB local code requirement. Ventilation sound near the pool and above the conference rooms will also be greatly reduced, minimizing equipment noise within the conference center and requiring less ductwork during installation.

With the addition of our low sound condensing fans, Greenheck can offer a variety of solutions for sound critical applications allowing for unprecedented design flexibility on select packaged energy recovery and make-up air equipment.

