

## PROJECT SUMMARY

### LOCATION:

Stevensville, MI

### PROJECT TYPE:

Supplying heating, cooling and fresh air to individual classroom spaces

### BUILDING USAGE:

Schools

### GOAL:

Ensure a comfortable, safe and healthy environment for students and staff

### FUNCTIONAL MANDATORIES:

Reliable performance, quiet operation, superior Indoor Air Quality (IAQ), and individually controlled units for each space

### PROJECT LAUNCH:

2015

### AIREDALE BY MODINE PRODUCT:

ClassMate® cooling and heat pump

# Airedale's ClassMate® Units Helps Create Comfortable Classroom Environment

## THE CHALLENGE

While doing a facility assessment for the Lakeshore Public School District, the district leadership team decided to focus on factors that impact student achievement. As part of that focus, the district took an evaluation of its HVAC units with the belief that a healthier, more comfortable environment would help students perform better.

One of the major concerns for teachers was the differences in temperatures throughout the classrooms. Parts of the rooms would be hot while other parts of the room would be cold. This wasn't comfortable for students or teachers. In addition, most of the buildings had old under-the-window unit ventilators that were noisy and provided only heat. Lakeshore School District Director of Operations, Nick White, was looking for a solution that was quieter and provided air conditioning to help ensure students were comfortable.

## THE SOLUTION

As part of Lakeshore's districtwide facility renovation projects, Scott Morgenstern of Kingscott and Scott Bolhouse of Bolhouse, LLC. teamed up to find an HVAC solution that met the district's needs.





In addition to two other options, the team presented the district with the Airdale ClassMate®. Despite not being the cheapest option, the district decided to go with Airedale because of the lack of noise and the sound decibel data provided by Modine.

The ClassMate® cooling and heat pump is the quietest single-packaged product of its type on the market. Engineered for efficiency, noise reduction and a small footprint, the unit has various features including:

- An advanced refrigeration system and coil design that maximizes efficiency and performance
- Advanced electrically commutated motor (ECM) on fans and 2-stage compressor technologies for decreased sound and power output
- Modulating economizer damper providing 100% free-cooling and minimum fresh air requirements
- DX, Hot Gas Reheat, and Hot Water/Electric Heat coils fit inside a standard unit, reducing installation time and the need for optional equipment
- Two-inch radial pleated disposable cotton and synthetic blend filter (up to MERV 13 filtration)
- Front access to all components for ease-of-service.

“The ClassMate® has great EC motors and an advanced refrigeration/coil design for a lot better efficiencies on the cooling side,” said Bolhouse. “The cooling efficiencies were unmatched, and that was a big part. Plus, we had certified sound data that we could show the district. We know it’s quiet. We’ve seen it run, and we know that this is a good fit for us.”



## THE RESULTS

The Lakeshore School District proceeded to install the ClassMate® in their elementary, middle and high school. Following installation, teachers praised the lack of noise and consistent temperature in the classrooms. “I think they were expecting to get the air conditioning and the comfort, but I think the (lack of) noise was the real surprise to them,” said White. “They are whisper quiet.”