

## PROJECT SUMMARY

### LOCATION:

Lincolnshire, IL

### PROJECT TYPE:

Supplying heating, cooling and fresh air to communal spaces in a luxury apartment complex

### BUILDING USAGE:

Apartment Complex

### GOAL:

Ensure a comfortable, safe and healthy environment to residents and staff

### FUNCTIONAL MANDATORIES:

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

### PROJECT LAUNCH:

2018

### AIREDALE BY MODINE PRODUCT:

ClassMate® cooling and heat pump

### UNITS INSTALLED:

1

# Airedale's ClassMate® Units Help Keep Communal Spaces Comfortable

## THE CHALLENGE

444 Social is a luxury apartment complex in Lincolnshire, Illinois. The 302-unit complex features a two-story community hub with floor to ceiling glass walls, a mid-century modern inspired conversation pit in the main lobby, and lively communal spaces.

Project owners wanted to find a way to unobtrusively heat, cool, and ventilate the communal spaces in the 444 Social complex. The building does not have a boiler suited for hydronic heating, and designers required that no mechanical equipment or air handlers be installed outside the space or on the roof of the building.

## THE SOLUTION

During the design process, The Engineering Studio, Inc., the main engineer on the project, approached FloMech, Inc., to find a solution to the cooling requirements. The company had previously used Modine HVAC products in school building projects and thought the Airedale ClassMate® DX Cooling and Heat Pump would be a good fit for the space.





It is the quietest single packaged product of its type on the market today. Engineered for efficiency, noise reduction and a small footprint, ClassMate® cooling and heat pumps include features such as:

- Patented CF microchannel evaporator coil
- Modine Controls System provides head pressure control with hot gas reheat selection
- Advanced blower and compressor technologies for decreased sound and power output
- No plenum required for additional hot gas reheat, hot water or electric heat coils
- Patented CF coil
- Higher EER, increased performance
- Smaller coil, smaller footprint
- Less refrigerant, lower energy costs
- Sound-deadening compressor acoustic wrap for even quieter operation
- Energy recovery wheel with up to 500 CFM of recovery
- BACnet or LonWorks compatible with the Modine Controls System
- Hot gas reheat with head pressure control for dehumidification
- MERV 16 filtration

## THE RESULTS

The general contractor fit the Airedale ClassMate® DX Cooling and Heat Pump units into the communal spaces, partially building them into the walls. The units are not visible to residents but are able to meet the heating and cooling needs for the common areas.

As package DX systems, ClassMate® units are compact and unobtrusive. All the air conditioning components, including the cooling and connector coils and compressor, are located in one cabinet. No remote connection unit is required. The units are also easily serviced. All components can be accessed from the front of the cabinet.

