



CASE STUDY

Healthcare Facility

Facility at a glance

Name

Ohio Veterans Home

Location

Sandusky, OH, USA

Building size

650,000 sq ft/3 buildings

Issue

Increase efficiency and integrate controls

Solution

402 Daikin Applied ThinLine™ vertical and horizontal fan coils (200 to 1200 cfm)

The Ohio Veterans Home, which serves 427 resident veterans, was initially built in 1888 and received its last major renovation in 1986.

Daikin Applied beats out competition for fan coil HVAC solution at large veteran's home

Issues

The Ohio Veterans Home (OVH), a 427-bed nursing home facility in Sandusky, Ohio, planned a mechanical renovation to upgrade plumbing and HVAC systems, among a number of capital improvement projects. The renovation included replacing its existing in-room fan coil units by another manufacturer. "The customer was looking for a more efficient solution and easy integration to their building controls," says Mike Eppich, Daikin Applied representative with Wadsworth Solutions Northeast.

Solution

OVH selected Daikin Applied's Thinline fan coil units over another manufacturer who had been initially specified by the architect. With Daikin, the specification replaced PSC motors for ECM motors. "At an 80 percent efficiency rating, ECM motors are significantly more efficient over the PSC design. ECMs allow for more efficient adjustment between heating and cooling as well as fan speeds," says Tom Nyberg, fan coil sales applications engineer at Daikin Applied.

"In addition to the energy-efficient motors, we supplied third-party controls by Viconics that satisfy OVH's use of the BACnet communications protocol in its building automation system (BAS)," Nyberg added.

Most of the 402 fan coil units supplied will be wall-mounted vertical systems. Installation is being staged in three phases at OVH's multi-wing complex with final completion by late summer 2016.

Outcome

"We do like the energy savings which is terrific," says Joe Tyree, maintenance superintendent at OVH. "We like the variable-speed ECM motors and expect these to last longer than the PSC-type motor which we have in our existing fan coil units." He also expects to see enhanced resident comfort. Each fan coil unit features a stand-alone thermostat and eventually controls will be integrated into the facility's BAS.

Mechanical improvements at OVH are also underway for converting the facility's 2-pipe system to 4-pipe. "This allows the fan coil units to have a separate chilled water system from the hot water system," Eppich says.

Efficiency and control integration were paramount decision drivers for OVH, but not the only benefits of working with Daikin Applied, as Nyberg attests: "Our ability to be flexible, quick in response, and at a more attractive price ultimately won over the customer."



Vertical unit



Horizontal unit

Daikin Applied ThinLine fan coils provided the efficiency and easy integration solutions the customer was looking for.