



Los Verdes features 12 suites ranging from 1100 to 6500 square feet.

CASE STUDY

Office Building

Facility at a glance

Name/Location

Los Verdes office building/34,000 ft²
Ponte Vedra Beach, FL, USA

Building Team

Brooks Air Systems, Inc. - HVAC supplier and controls system
N.E. Florida Heating & Air - mech. contractor
MountainStar Capital - building owner

Issue

Replacement of rooftop units and controls for maximum energy efficiency

Solution

(2) 50-ton Daikin RoofPak™ rooftop units with variable speed compressors

Office upgrades to RoofPak units with variable speed compressors

Issues

Los Verdes, a three-story Class A commercial office building in Ponte Vedra Beach, FL, a seaside community near Jacksonville, needed to upgrade its HVAC system after 15 years of operation. Building owners made the decision to upgrade with the same manufacturer and selected two 50-ton Daikin RoofPak applied rooftop units to ensure many years of economical service.

"Climate conditions require faster replacement in coastal areas," said Russ Gillette, P.E., LEED AP, sales engineer with Brooks Air Systems in Jacksonville. "The customer saw value in ordering a configuration with a variable-speed compressor in each unit for improved temperature and comfort control."

Solution

To avoid having to shut down the building, installation was staged over two successive weekends ending in early May 2014 for both the rooftop and controls retrofit. Mike Kelly, Sr., vice president at the installing contractor Northeast Florida Heating & Air in Jacksonville said: "We started shutting down the first machine at 5 p.m. on a Friday and disassembled duct and electrical. On Saturday, the crane arrived and we brought equipment to the site. Each replacement was completed by Sunday including the electrical, ductwork and controls."

Simultaneously, the building automation system (BAS), Alerton's® Envision for IBEX hardware and software, was upgraded to the latest version of Envision for BACtalk® featuring a user friendly, rich graphical interface. Said Rob Simcoe, project manager with Brooks Air Systems: "On each weekend, we retrofitted the variable air volume (VAV) fan boxes to integrate with the controls on each RoofPak unit."

Outcome

Simcoe said: "With the new BAS, the facilities manager is able to better monitor and control all the setpoints on each RoofPak unit via the BACnet™ interface on the Daikin MicroTech® III controls."

Additionally, the customer expects to reap significant energy savings from the variable speed compressor technology on the RoofPak units. Startup and commissioning the new systems went smoothly, Kelly said. "The RoofPak units have been operating well."



Installation of Daikin RoofPak units was staged over two weekends to ensure a successful retrofit.