



Jared Square offers a variety of suites to accommodate a dozen businesses.

Alabama Office Building Gets Latest Generation Daikin HVAC

ISSUE:

Aging equipment, improved occupant comfort and energy savings catalyzed the decision to replace the HVAC equipment at this one-story office building in Birmingham, AL. Building owner Michael Jared of Jared Properties, a former Daikin Applied representative for over 35 years, originally specified Daikin ceiling-concealed horizontal water source heat pumps (WSHPs) when he oversaw the construction of Jared Square in 1985. So when it came time for replacement almost 30 years later, Jared confidently selected 32 Daikin Infinity WSHPs with Daikin Intelligent Systems controls for optimized performance. "I also had the opportunity to be one of the first users of the new Intelligent Systems controls with the latest loop water manager. This is absolutely cutting-edge technology for WSHPs and their control system," Jared said.

SOLUTION:

The retrofit process was staged over a six-month period to avoid disruption to tenants that occupy 12 offices of various sizes. "We replaced one unit at a time over a night or weekend to avoid disruption," Jared said, adding, "The 32 ceiling-mounted WSHPs have all operated well."

Jared Square implemented new Intelligent Systems controls technology concurrent with the installation of a new system panel and water loop manager. "The system manager consists of an industrial-grade laptop computer mounted in a panel that daisy chains throughout the building to contact each MicroTech® controller and compressor on each unit," Jared said.

Prior to the Intelligent Systems controls integration, the units could only be controlled using analog functions. Combining them allows digital precision monitoring down to the unit level, in one building or many.

Jared has 24/7 access to the Intelligent Systems controls interface, whether on his desktop PC, iPhone, or iPad so he can take immediate action for any issue. Small companies typically don't get such a luxury. "Jared Square is an excellent example of how you can apply large



NAME:

Jared Square

LOCATION:

Birmingham, AL, USA



FACILITY SIZE:

16,800 ft²



ISSUE:

Upgrade HVAC systems and controls



SOLUTION:

(32) Daikin Infinity water source heat pumps with Daikin Intelligent Systems® controls and loop water manager

SOLUTION (CONTINUED):

building controls to a light commercial building of smaller size for efficiency and accessibility, especially for retrofit applications,” said Chad Senger, controls product manager at Daikin Applied. “This is a type of control you only used to see applied to large buildings.”

OUTCOME:

Jared is particularly pleased with the Energy Efficiency Ratio (EER) of the Infinity WSHPs and said the controls technology enhances an already productive system. “The system gives you precise control for temperature and operating hours in occupied and unoccupied modes. Our tenants appreciate that we can pre-program their in-ceiling units to their office hours and temperature needs,” Jared said. “The system turns the loop pump on and off. In setback mode the entire system

shuts down automatically, all contribute to increased energy savings,” he adds.

“Based on what we have seen so far, the new Intelligent Systems controls package, combined with the new WSHPs, will result in substantial savings. Perhaps in the 20 percent range, over the original equipment.” Jared concludes “It’s an economical system that is energy saving and does an awful lot.”



Daikin Infinity ceiling-mounted water source heat pumps were daisy chained to the Intelligent Systems loop water manager, allowing for 24/7 controls access from any mobile device.

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– Michael Jared, Building Owner, Jared Square