D&B ENGINEERING
The Leader In Eco-Friendly HVAC Solutions

CASE STUDY

Century Tower—Fort Lee, NJ

Issue: Existing system was old and needed to be replaced with a solution to accommodate the difficult restraints of the massive structure

Solution: Daikin Skyline Air Handling Units (AHU's) connected to Daikin VRV condensing units by an AHU integration valve kit

Tall Order Met at New Jersey Tower

D&B Engineering provides unique HVAC solution for high-rise condominium

For three years, the architects at The Falcon Group searched for a solution to accommodate the HVAC needs at Century Tower, a high-rise condominium in Fort Lee, NJ. The existing Trane equipment needed to be replaced with the most cost-effective solution to heat and cool the expansive corridors of this 30-story structure.

A typical rooftop solution would require a crane rental costing over $100,000, as well as expensive street closing permits. In addition, the financial risk of scheduling a crane with potential weather delays during the approaching winter season was extremely high.

To the delight of Century Tower owners, D&B Engineering was able to provide a unique, state-of-the-art solution to accommodate their specific requirements. D&B supplied two Daikin Skyline Air Handling Units along with eight Daikin VRV Condensing Units, coupled together using an AHU integration valve kit. This innovative kit enables a non-VRV AHU to be seamlessly integrated into a VRV system, allowing the benefits of inverter technology to extend to all system components.

James Trynosky, Vice President at The Falcon Group, explained: "Crane operations would be difficult due to the configuration of the site, and the proximity to the neighboring buildings. We struggled to find a solution that would meet our requirements and were put in touch with D&B, who was now offering this unique solution by Daikin that met our needs. It worked out nicely in the end as we were able to offer a lower cost, less invasive project as an alternative to conventional packaged rooftop mounted equipment."

Another challenge was transporting the Daikin equipment through the tower's entrance and into the loading elevator. To satisfy these constraints, D&B Engineering chose Daikin Skyline AHUs with a modular construction option, allowing them to ship in pieces. In addition, Variable Dimensioning allowed D&B to change the height and width of the equipment during the selection process. The AHUs could be transported using the elevator, and reconstructed atop the roof. "This is what made this particular HVAC solution perfect for Century Tower. If it weren't for the modular construction capability, rigging would have been the only available option," stated Bruno Rzeszutko, D&B Sales Engineer.

The Daikin Skyline units were also chosen for their ability to provide superior indoor air quality and lower operating costs. The patented gasket frame channel, double-wall, injected-foam panels and cross-broken top panels keep tight separation between conditioned inside air and outside air, resulting in significant savings on energy bills.

The Daikin VRV system is renowned for its efficiency, making it the ideal choice for multi-tenant buildings. Its capability to distribute refrigerant from the outdoor unit to multiple indoor units provides efficiency and reliability in one flexible package. The VRV equipment is modular and customizable, which was crucial to successfully meeting the challenges at Century Tower.

The Falcon Group and Century Tower owners were pleased with the results. "D&B was extremely helpful on the technical side. Any time I had a question, it was answered quickly and thoroughly. Because of this, we felt comfortable moving forward with this solution," Trynosky commented.

For more information on D&B Engineering, Daikin AHUs and VRV products, visit us at www.dbnj.com.

D&B ENGINEERING OF NEW JERSEY, INC.
444 John F. Kennedy Drive North
Bloomfield, New Jersey 07003
Tel (973) 429-2828 | Sales Fax (973) 429 4909
Administration Fax (973) 429-7560
www.dbnj.com