



CASE STUDY

Edison Municipal Building—Edison, NJ

Issue: Existing system was inoperative and needed to be replaced without interruption to the government location

Solution: A direct replacement of a new, efficient 250-ton Daikin Pathfinder air-cooled chiller

Government Facility Receives Same Day Chiller Upgrade

D&B Engineering provides a direct chiller replacement to Edison Municipal Building

For some facilities, a direct replacement of an outdated or inoperative HVAC system is an ideal option in order to save time and cost on either relocating or modifying the existing systems' site. Government facilities, specifically municipal buildings, which house the town's courts, require as little interruption as possible. When Edison Municipal Building in Edison, NJ experienced a problem with their existing air-cooled chiller, D&B Engineering provided a direct replacement. This was decidedly the best route to get back up and running with no disruption to court schedules.



AME Inc., building automation specialists, of Fairfield, NJ and Lightning Mechanical, contractor on the job, located in Maplewood, NJ worked alongside D&B Engineering to weigh options and come up with the best course of action. Ed O'Connor, Vice President of D&B Engineering, commented, "Direct replacement was the ideal option because the existing infrastructure is compatible with the equipment. Whenever you change the design, you accrue cost for engineering, additional materials, etc. By avoiding this process, we were able to minimize the upgrade cost."

In addition, D&B opted to do a direct replacement because the existing 100% configurable Daikin Pathfinder had proved reliable and efficient for years. Craig Gallagher, President of Lightning Mechanical remarked, "Daikin's Pathfinder screw chillers are extremely robust and durable units. I've seen these units on particular jobs that have been running for over 35 years!"

The Pathfinder's unique compressor design with Variable Volume Ratio (VVR) technology adds to the appeal of the unit. VVR compression technology senses the precise amount of lift needed and adjusts the compression ratio immediately to deliver optimal efficiency. VVR technology delivers only the exact lift needed, so the building owner won't pay for over-compression.

A sound attenuation package reduces noise and vibration from the chiller as well, resulting in neighborhood friendly sound levels. At all load points, the single rotor and built-in muffler design keep sound levels down while delivering up to 550 tons of cooling.

It is a common misconception that replacing a broken part or multiple parts on a unit would be less expensive than purchasing a brand new unit. However, Daikin's competitive price points allowed the cost of a full replacement to be comparable to a part-by-part repair. "When we were pricing out the parts needed to fix the existing unit, it was actually more cost effective to purchase a whole new unit with a warranty included," stated Gallagher.



Vergona Crane Company (Englewood, NJ) rigging the new Daikin Pathfinder into place at Edison Municipal Building.

The included warranty sealed the deal on the unit's full replacement for the building owner as the security of having coverage on future needs was very attractive. D&B Engineering's direct replacement at Edison Municipal Building was a great success and the government facility's heating and cooling needs continue to be served efficiently and without interruption.

For more information on D&B Engineering, direct replacements & Daikin Pathfinders, visit us at www.dbnj.com.