TECOCHILL®

CH-200*x* – ST*x* Series CHILLER

Case Study

SITE: FORENSIC SCIENCE CENTER - PHILADELPHIA, PA

Tecogen Inc. has supplied a TECOCHILL natural gas engine driven cooling system to a 2006 environmental award-winning site in Philadelphia.

An abandoned 1929 art deco school building in Philadelphia, now known as the Forensic Science Center for the Philadelphia Police Department, was chosen by the American Institute of Architects (AIA) Committee on the Environment as one of the Top Ten Green Projects for 2006. The City of Philadelphia mandated that the project improve management, reduce energy use, reduce impact on the region's air and watershed, slow the depletion of natural resources, improve the work environment of employees, develop local business opportunities and save taxpayer dollars. The abandoned building is now a state-of-the-art forensics laboratory facility and serves as a demonstration project for environmentally sustainable design. This benchmark project is intended as a model for all future projects undertaken by the City of Philadelphia's Capitol Program Office.

Top-Ten "Green" Design Project Uses TECOCHILL

Despite the energy-intensive requirements of the Center's laboratories, the project achieved the following improvements over an ASHRAE 90.1 "common practice"

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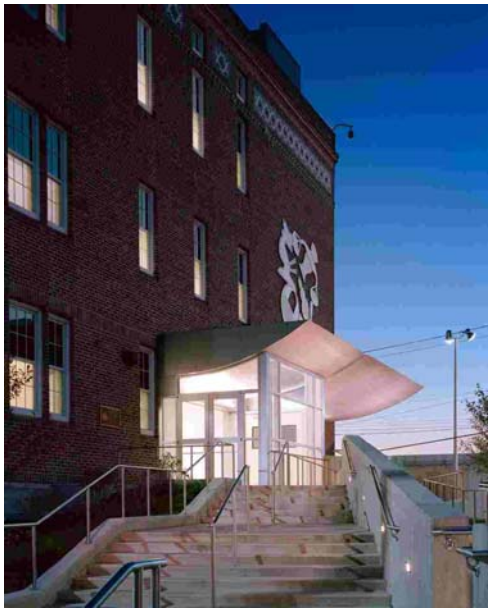
building that would meet the fundamental green design program requirements:

- 72 percent reduction in total annual source energy
- 69 percent reduction in 25-year CO2 emissions (global warming)
- 67 percent reduction in total annual utility bill
- 65 percent reduction in 25-year CO2, SO2 and NOx emissions (acid rain, ozone, smog)
- 61 percent reduction in annual peak electrical demand
- 2.2 year payback for energy strategies.

"TECOCHILL chillers are normally purchased by customers for energy savings," said Robert Panora, President of Tecogen, manufacturer of the TECOCHILL, "however, we're seeing more sites than ever before with environmental objectives as well. We are proud to be a part of this 'green' award-winning site that uses our energy efficient equipment, along with the many other environmental design features."

The National AIA Committee on the Environment Top Ten Green Project for 2006 award was presented to Croxton Collaborative Architects, P.C. in New York City, which executed the project as a joint venture with Cecil Baker & Associates in Philadelphia. "This project established our sustainable model for future city building projects," said Loren Reiter of Croxton.

Panora added, "Electrically driven equipment is inherently inefficient because most of the fuel that gets burned at the electric power plant goes out the stack and cooling tower as heat emissions. On the other hand, using a direct drive from a natural gas engine allows the waste heat to be captured and used on-site. The hot water generated is truly a free waste byproduct, available for use without requiring any additional fuel consumption. Peak demand savings are becoming a major consideration for choosing natural gas engine-driven chillers, which reduce the need to build new electric power plants. As a result, the building's technology is not only proving cost effective but is doing something good for the environment as well."



FOR MORE INFORMATION:

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