

PARTNERENERGY

The analysis for this project was conducted for NYSERDA by Will Shoard while employed by EME Group.

CASE STUDY: FLOYD BENNETT FIELD

OVERVIEW

The Floyd Bennett Field built in 1928 in Brooklyn was New York's first municipal airport. In 1980, the National Park Service added eight original hangars to the US National Register of Historic Places.

As part of a community redevelopment plan in 2006, four of the eight original hangars were adapted for reuse and are now a 150,000 square foot sports and entertainment complex. The new sports and entertainment complex comprises two ice-rinks, four regulation sized basketball courts, two indoor soccer fields, game courts, a gymnasium, and a food hall.



ENERGY MODELING

The goal of energy modeling is to quantify the savings from various energy efficiency measures during the design phase of a project

PROJECT DETAIL

Partner Energy staff were responsible for liaison with the architect, developer, and design team to determine the feasibility of incorporating various energy efficiency measures during the design phase of the development.

Energy efficiency measures that were agreed to be further assessed and incorporated into the building design included ice temperature reset controls, heat recovery from exhaust fans, the use of a direct digital integrated building management system, daylight controls for lighting, variable frequency drives installed for fan and pump motors, and building envelope enhancements.

Partner Energy staff generated the dynamic computer simulation model for the building and carried out analysis of the buildings thermal performance for each of the proposed energy efficiency measures both separately and interactively. The proposed building design was checked against the requirements of the Energy Conservation Construction Code of New York to ensure compliance.

:: BUILDING SNAPSHOT ::

Building Name
Floyd Bennett Field
Location
Brooklyn, New York
Year Built
2006

Energy Efficiency Measures

- Ice temperature reset controls -
- Daylight controls for lighting -
- Direct digital building EMS -
- Exhaust fan heat recovery -
- Variable Frequency Drives -

Project Benefits

NYSERDA energy financing incentives
Lower operating costs
Increased sustainability and community awareness of energy efficiency projects