

GEATAIN ENGINEERING

CASE STUDY- 400 Fifth Avenue



BACKGROUND

Located at 400 Fifth Avenue, the modern and attractive Langham Hotel and Residences is a refined, well-maintained hotel at the center of the metropolis that is New York City. It is in an ideal location between Bryant Park and the Empire State Building in Midtown Manhattan.

Evaluations were performed of this popular building's energy usage. An in-depth survey was conducted to understand existing HVAC equipment operations, conditions, and limitations. The building was constructed recently in 2010, indicating that it had modern equipment and minimal insulation problems. Discussions with operators and property managers about day-to-day occupancy schedule revealed that lighting was consistently on, and that indoor temperatures were maintained even during low occupancy.

HOW GEATAIN ENGINEERING HELPED

- Designed a more active approach to sustainable operations.
- Extra attention was paid to equipment performance to uncover earlier than anticipated replacement needs.
- Quantified thermal capacity of building envelope to retain more winter heat and summer air conditioning.

BENEFITS

- Advised ownership of opportunities to delay large outlay of capital while complying with Local Laws.
- Implemented bi-level stairwell lighting with lighting drivers and occupancy sensors to dim lights during low traffic.



CHALLENGES

- Newly constructed building with advanced equipment
- Determining measures beyond typical building lighting

SOLUTIONS

- Guest Heating Controls
- Cogeneration
- Real Time Energy Management System
- Bi-level Stairwell Lighting
- Occupancy Sensors
- Plug load reduction

FIVE YEAR SAVINGS

\$ 163,430

For more information,
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