GEATAIN ENGINEERING

CASE STUDY-RENAISSANCE HOTEL

BACKGROUND

Renaissance Hotel is located in 218 West 35th Street in Midtown, Manhattan. Completed in 2010. This stylish and artful 39-story large hotel is near several attractions, restaurants, and metro lines.

HOW GEATAIN ENGINEERING HELPED

Geatain implemented the following step by step analysis:

- Analyzed building operations to determine precise recommendations to improve occupancy comfort, streamline operations and lower carbon emissions.
- By considering climate zone, envelope tightness, building layout and related considerations, Geatain determined optimal location and sizing of heat pumps.
- Determined building envelope tightness with several different tests to determine building specific heat loss.
- Evaluated tightness of several different types of windows within building to help refine capacity of heat pump system.

BENEFITS

- Advanced heating controls show real time energy usage and historic trends to help identify savings opportunities.
- Advised ownership of opportunities to delay large outlay of capital while complying with Local Laws.

geatain
SIMPLE LL97 COMPLIANCE
PAID BY OTHERS

CHALLENGES

- Inefficient lighting.
- Manual wall switches cause energy waste.
- Phantom electric loads.
- Building equipment not as efficient.

SOLUTIONS

- LED lighting and controls.
- Occupancy sensors.
- BMS.
- Real time energy management.
- PoU heaters.
- Smart strips.
- Heat pumps.
- Feeder improvements.

LIFECYCLE SAVINGS

$ 1,604,320

For more information, email tjm@geatain.com