GEATAIN ENGINEERING

CASE STUDY-MURRAY HILL MANOR



BACKGROUND

Murray Hill Manor is located in 166 East 34th Street in Manhattan. Completed in 1975. This brick exterior 21-story large apartment building is in Midtown. Near the building there are offices, parks, and restaurants. The building is heated by a steam gas boiler that provides steam, DHW is supplied by the boiler and there are very rudimentary and simple heating controls. Fairly new fan coils provide cooling, there are mushroom ventilators on the rooftop, and most of the residential spaces are lit by LED lighting with some CFL and fluorescents. There are no occupancy sensors and windows vary in age. Geatain surveyed the building and found several ways to save energy and money.

HOW GEATAIN ENGINEERING HELPED

- Completed a thorough study of common area and unit electric panels to assess electrification sufficiency.
- Completed granular analysis into condition of existing electric panels to determine if they could be reused for future electrification.
- Evaluated tightness of several different types of windows within building to help refine capacity of heat pump system.

BENEFITS

- Advised ownership of opportunities to delay large outlay of capital while complying with Local Laws.
- Uncovered obscure funding opportunities to decrease burden of equipment improvements.



CHALLENGES

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

SOLUTIONS

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

LIFECYCLE SAVINGS

\$ 4,249,450

For more information, email tim@geatain.com