

GEATAIN ENGINEERING

CASE STUDY- 225 East 106th Street



BACKGROUND

225 East 106th Street is a 20-story, 147,732-square-foot co-op residential building located in Manhattan, New York. Constructed in 1961, the building contains 117 residential units. The building receives heat and DHW from four low-pressure gas-fired steam boilers in the boiler room located at 2081 2nd Avenue. The boilers there are controlled by a Multi-MOD Platinum Heat-Timer. For ventilation, the building has two exhaust fans on the roof that connect to exhaust grilles in the hallways and the bathrooms, the boiler room has an exhaust fan and louvers, and the elevator room has a gravity ventilator.

HOW GEATAIN ENGINEERING HELPED

- Completed granular analysis into condition of existing electric panels to determine if they could be reused for future electrification.
- Adjusted temperature setpoints to match seasonal variations to decrease summer cooling and winter heating.
- Uncovered hidden opportunities by exhaustively interviewing all members of operations staff.

BENEFITS

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



CHALLENGES

- High electrical usage.
- Inefficient heating.
- Little efficiency in DHW.

SOLUTIONS

- Pipe Insulation.
- De-lamping.
- Heat Pumps.
- Envelope.
- Plug Outlet Controls.
- Night Setback.
- DHW Temperature.
- Unit LEDs.
- Tenant Load Reductions.

FIVE YEAR SAVINGS

\$474,555

For more information,
email tjm@geatain.com