

GEATAIN ENGINEERING

CASE STUDY - 2065 1st Avenue



BACKGROUND

2065 1st Avenue, at the Franklin Plaza Apartments, is a 20-story, 124,000 square foot co-op residential building located in Manhattan, New York. Constructed in 1961, the building houses 117 residential units. The boiler room in 2086 2nd Avenue contains three low-pressure gas-fired steam boilers which provide steam for space heating and DHW for this building. These boilers are controlled by a Multi-MOD Platinum Heat-Timer. There is an 1800-gallon DHW tank with a built-in steam-to-HW heat exchanger that provides DHW. This building has two exhaust fans on the roof for ventilation that connect to exhaust grilles in hallways and bathrooms. The boiler room has an exhaust fan and louvers, and the elevator room has a gravity ventilator.

HOW GEATAIN ENGINEERING HELPED

- Identified financial constraints to ensure energy efficiency measures (EEMs) were implemented to meet client budgets.
- Completed extensive amperage study of common area and unit electric panels for electrification sufficiency.
- Input from Property Engineer proved invaluable to streamline assessment, evaluation and recommendations.

BENEFITS

- Provided several alternative paths to comply with LL97-Carbon Emissions law.
- Operations measures extend equipment useful-life besides saving costs.



CHALLENGES

- Extensive use of inefficient CFL lighting in apartment units.
- Existing radiators contain simple throttling valves.
- Insulation around piping in poor condition.

SOLUTIONS

- TRV
- Building Envelope
- DHW Temperature
- Window AC Replacement
- Pipe Insulation
- Delamping
- Heat Pumps
- Wall Occupancy Sensors
- Unit LEDs
- Smart Strips

FIVE YEAR SAVINGS

\$414,505

**For more information,
email tjm@geatain.com**