

# GEATAIN ENGINEERING

## CASE STUDY- 211 East 106<sup>th</sup> Street



### BACKGROUND

211 East 106<sup>th</sup> Street, at the Franklin Plaza Apartments, is a 20-story, 132,580-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 the boiler room located at 2081 2nd Ave. 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

- Analyzed building operations to determine precise recommendations to improve occupancy comfort, streamline operations, and lower carbon emissions.
- Completed granular analysis into condition of existing electric panels to determine if they could be reused for future electrification.
- Regression analysis helped to uncover hidden envelope savings opportunities.

### BENEFITS

- Bi-level stairwell lighting combines lighting drivers and occupancy sensors to reduce lighting in stairwells.
- Identified hidden opportunities for occupants to lower energy costs.



### CHALLENGES

- Old air conditioners in the building's apartments.
- Manual light switches that are consistently left on.
- Poor pipe insulation.

### SOLUTIONS

- Annual Boiler Tuning.
- Envelope.
- DHW Temperature.
- Pipe Insulation.
- Heat Pumps.
- Smart Strips.
- Wall Occupancy Sensors.
- Unit LEDs.
- Bi-Level Lighting.
- Window AC Replacement.

### FIVE YEAR SAVINGS

\$414,765

For more information,  
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