

# GEATAIN ENGINEERING

## CASE STUDY- 324 East 108<sup>th</sup> Street



### BACKGROUND

324 East 108<sup>th</sup> Street, 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 contains 117 residential units. The building receives heat and DHW from the boiler room located at 2086 2nd Ave. These boilers 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

- Worked closely with manufacturer and contractor to dovetail electrification solutions to property characteristics.
- Quantified thermal capacity of building envelope to retain more winter heat and summer air conditioning.
- Analyzed building operations to determine precise recommendations to improve occupancy comfort, streamline operations and lower carbon emissions.

### BENEFITS

- Identified hidden opportunities for occupants to lower energy costs.
- Advised ownership of opportunities to delay large outlay of capital while complying with Local Laws.



### CHALLENGES

- Lack of insulation on piping.
- Manual light switches that are kept on for long periods of time.
- Too much lighting per square foot.

### SOLUTIONS

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

### FIVE YEAR SAVINGS

\$365,890

For more information,  
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