# **GEATAIN ENGINEERING** CASE STUDY- 325 East 106<sup>th</sup> Street



#### BACKGROUND

325 East 106<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. A Multi-MOD Platinum Heat-Timer controls these boilers. 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

- Provided exhaustive evaluation of property infrastructure to reveal hidden savings opportunities.
- Analyzed occupancy schedule to determine the most feasible locations for occupancy sensors so HVAC run times could be minimized.
- Monthly involvement of ownership helped to align project focus to tailored property needs.

#### **BENEFITS**

- Owner appreciated in-depth discussion of latent electrification costs.
- Focusing on controls revealed obscure savings opportunities
- Simple plug outlet savings produce meaningful emission reductions.



#### **CHALLENGES**

- Excessively high domestic hot water temperature.
- Poor pipe insulation.
- Inefficient CFL lighting.

### SOLUTIONS

- Boiler Controls.
- Pipe Insulation.
- Envelope.
- DHW Temperature.
- Bi-Level Lighting.
- Heat Pumps.
- Unit LEDs.
- Wall Occupancy Sensors.
- Window AC Replacement.
- Plug Outlet Controls.

FIVE YEAR SAVINGS \$430,615

For more information, email tjm@geatain.com