

GEATAIN ENGINEERING

CASE STUDY- 334 East 108th Street



BACKGROUND

334 East 108th Street, at the Franklin Plaza Apartments, is a 20-story, 124,00 square foot co-op residential building located in Manhattan, New York. Constructed in 1961, the building contains 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 also an 1800-gallon DHW tank with a built-in steam-to-HW heat exchanger, which provides DHW to this building. Cooling for residents and for the elevator room is provided by window ACs.

HOW GEATAIN ENGINEERING HELPED

- Worked closely with manufacturer and contractor to dovetail electrification solutions to property characteristics.
- Extra attention was paid to equipment performance to uncover earlier-than-anticipated replacement needs.
- Examined most practical spaces in the building to locate wall occupancy sensors for increased savings.

BENEFITS

- Boilers operate much more efficiently with reduced cycling and shorter run times.
- Advanced heating controls show real-time energy usage and historic trends to help identify savings opportunities.



CHALLENGES

- Simple throttling valves that cannot significantly control temperature.
- Lack of advanced boiler controls.
- Old residential unit air conditioners.

SOLUTIONS

- Envelope.
- Annual Boiler Tuning.
- TRV.
- Unit LEDs.
- Heat Pumps.
- Window AC Replacement.
- Wall Occupancy Sensors.
- Bi-Level Lighting.
- Plug Outlet Controls.
- Boiler Controls.

FIVE YEAR SAVINGS

\$326,740

*Savings with returns less than five years over the next five years.

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