GEATAIN ENGINEERING CASE STUDY- 110 West 94th



BACKGROUND

110 West 94th Street is a multi-family residential building located in Manhattan, New York City. Built in 1936, the 37-unit building has 6 stories that consist of a mix of studio, one, and two-bedroom apartments. The building's heat is generated by the water generated by one low-pressure #4 Fuel Oil hydronic Easco boiler located in the basement mechanical room with the model number FST-80. Lastly, the boiler at 110 West 94th is controlled by an MPC Gold Series Heat-Timer, running on spring and fall modes.

HOW GEATAIN ENGINEERING HELPED

- Examined most practical spaces in building to employ wall occupancy sensors that will allow for the greatest efficiency and savings.
- Staff appreciated reducing the number and types of replacement LED bulbs to reduce storage needs and simplify replacement schedules.
- Worked extensively with building engineers to enhance daily operations and preventative maintenance procedures to increase building energy performance.

BENEFITS

- Popularity of plug outlet savings leads to meaningful carbon reductions.
- Advanced heating controls show real-time energy usage and historic trends to help identify savings opportunities.



CHALLENGES

• Little efficiency in DHW.

• Envelope seals are missing some caulking.

SOLUTIONS

- Pipe Insulation.
- DHW Temperature.
- Window AC Replacement.
- Bi-Level Lighting.
- Heat Pump.
- Outlet Controls.
- Envelope.
- Wall Occupancy Sensors.
- Unit LEDs
- Smart Strips.

FIVE YEAR SAVINGS \$414,765

For more information, email tjm@geatain.com