

GEATAIN ENGINEERING

CASE STUDY- 400 West 58th Street



BACKGROUND

400 West 58th Street is a multi-family residential building located in Hell's Kitchen, New York City. Built in 1957, the 46-unit property has a total of 6 stories, with the 1st being a restaurant with a total square footage of 40,512. The building's heat is generated from their gas-fired steam Hephaestus 2P5-8080 boiler and a PowerFlame C2-G-20BBRS burner. The boiler is controlled by an MPC Platinum-Heat timer with the serial number MPC00S11S450. There is also a Baldor pump that pumps cold water throughout the building that cycles excessively.

HOW GEATAIN ENGINEERING HELPED

- Evaluated tightness of several different types of windows within building to help refine capacity of heat pump system.
- Analyzed occupancy schedule to determine most feasible locations for occupancy sensors so HVAC run-times could be minimized.
- Examined most practical spaces in building to locate wall occupancy sensors for increased savings.

BENEFITS

- Adjusting ventilation schedules helps prolong equipment life and magnifies savings.
- Natural daylighting supplements the need for artificial lighting and improves occupant health-wellness.



CHALLENGES

- Boiler inefficiency.
- Poorly sealed apartment windows.
- Outdated equipment.

SOLUTIONS

- Smart strips
- Window AC Replacement
- Interior lighting control
- Envelope
- Bi-Level Lighting.
- Heat Pumps.
- Unit LEDs.
- Boiler Controls.

ANNUAL SAVINGS

\$186,485

For more information,
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