

GEATAIN ENGINEERING

CASE STUDY- 400 West 23rd Street



BACKGROUND

400 West 23rd Street is a 60,183-square-foot co-op residential building located in Manhattan, New York City. Built in 1920, the 60 residential unit property has a total of 6 stories. The property's heating and domestic hot water is mainly provided by one 125 HP, low-pressure gas-fired steam boiler manufactured by Rockmills and is in the basement. An MPC Platinum Heat-Timer controls the boiler runtimes and operates in Summer or Winter mode. Additionally, Islandaire PTAC units provide both heating and cooling to the apartments.

HOW GEATAIN ENGINEERING HELPED

- Completed granular analysis into condition of existing electric panels to determine if they could be reused for future electrification.
- Uncovered hidden opportunities by exhaustively interviewing all members of operations staff.
- Control algorithms offer multiplicative savings opportunities.

BENEFITS

- Owner appreciated in-depth discussion of latent electrification costs.
- Improved operations of infrastructure subcomponents to align more comprehensive solutions.



CHALLENGES

- The roof of the building is in poor condition.
- Existing radiators only contain simple throttling valves.

SOLUTIONS

- Plug Outlet Controls.
- Annual Boiler Tuning.
- TRV.
- Night Setback.
- Envelope.
- Heat Pumps.
- Smart Strips.
- Unit LEDs.
- Boiler Controls.
- Delamping.

ANNUAL SAVINGS

\$171,970

For more information,
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