

GEATAIN ENGINEERING

CASE STUDY - 2421 Webb Avenue



BACKGROUND

2421 Webb Avenue, at Fordham Oval, is a 130,218 square foot co-op residential building constructed in 1950 and located in the Bronx, New York. Heating and domestic hot water are provided by four low-pressure dual fuel, 400 HP steam boilers located in the basement. The boilers are f A.L. Eastmond & Sons Inc and Easco. A 15,000-gallon oil tank provides #2 fuel oil to all four boilers for heating and domestic hot water. This tank is controlled by an Oil Tank Monitor MSI Network by Heat-Timer. There are eight exhaust fans on the roof, four of which ventilate the hallways and the remaining ventilate the bathrooms.

HOW GEATAIN ENGINEERING HELPED

- Contacted industry professionals and manufacturers to accurately calculate savings projections.
- Completed granular analysis into condition of existing electric panels to determine if they could be reused for future electrification.
- Regression analysis helped to uncover hidden envelope savings opportunities.

BENEFITS

- Achieved drastic carbon emissions reductions through improving operational routines and equipment.
- Provided several alternative paths to comply with LL97-Carbon Emissions law.



CHALLENGES

- Lighting consumes a significant amount of energy.
- Lack of insulation on heating system equipment.
- The exhaust fans responsible for ventilating the corridors are out of service.

SOLUTIONS

- Ventilation Schedule
- Heat Pumps
- Delamping
- Night Setback
- Pipe Insulation
- Plug Outlet Controls
- Bi-Level Lighting
- Common Area LEDs
- Unit LEDs
- Wall Occupancy Sensors

FIVE YEAR SAVINGS

\$233,910

For more information,
email tjm@geatain.com