

GEATAIN ENGINEERING

CASE STUDY-9920 FOURTH AVENUE



BACKGROUND

9920 Fourth Avenue is a 3-story medical office building in the Bay Ridge of Brooklyn constructed in 1977. Geatain Engineering surveyed the 12,000 square feet of the west side of the first floor. The building houses various medical field tenants, including equipment such as medical scanners and various office loads. The building has two boilers, heat timers, and one tankless hot water heater. Cooling is provided by an air handling unit and cooling towers. Fan coil units also heat and cool the space. Ventilation is provided by one exhaust fan and one supply fan. Lighting is provided mostly by T8 fluorescent bulbs, although some CFL bulbs are used. Some challenges include the lack of submetering. Another challenge was the lack of consideration of daily operations, leading to the loss of energy. The office has a variety of equipment in use that is never turned off.

HOW GEATAIN ENGINEERING HELPED

- Completed granular analysis into condition of existing electric panels to determine if they could be reused for future electrification.
- Adjusted temperature setpoints to match seasonal variations to decrease summer cooling and winter heating.
- Regression analysis helped to uncover hidden envelope savings opportunities.

BENEFITS

- Provided all-encompassing funding package to decrease initial capital outlay.
- Uncovered obscure funding opportunities to decrease burden of equipment improvements.



CHALLENGES

- The lack of submetering and relatively small annual savings made it difficult to acquire precise measurement and verification for solutions.
- Annual savings from the different solutions may be difficult to track and quantify.

SOLUTIONS

- Thermal setpoint.
- Natural ventilation.
- Medical equipment.
- Smart strips.
- Wall occupancy sensors.
- Current capacitor.
- Equipment sleep modes.

ANNUAL SAVINGS

\$ 3,505

For more information,
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