

GEATAIN ENGINEERING

CASE STUDY - 301 Elizabeth Street



BACKGROUND

The modern SoHo court at 301 Elizabeth Street was constructed in 1991 as a mid-rise, luxury condominium building focused on ensuring maximum comfort to tenants. The building has a covered entrance, courtyard, and a well-maintained garden encapsulated by an intricate brick facade that houses 194 units.

A survey of the building and its equipment was carried out to understand current conditions. History of HVAC equipment was discussed with property managers and operators to understand daily operations. It was found that domestic hot water and heating controls were beyond useful life span. Other equipment, such as house pumps and air conditioners, were in suitable condition. However, building windows were poorly sealed and led to significant heat loss.

HOW GEATAIN ENGINEERING HELPED

- Completed extensive amperage study of common area and unit electric panels for electrification sufficiency.
- Analyzed building operations to determine precise recommendations to improve occupancy comfort, streamline operations and lower carbon emissions.
- Tabulated financial considerations and delivered analysis report to property manager.

BENEFITS

- Advised ownership of opportunities to delay large outlay of capital while complying with Local Laws.
- Performance tracking allows for real time energy usage control and feedback for entire property.



CHALLENGES

- Legacy equipment beyond useful life span.
- Lack of sufficient insulation in building.
- Existing heating controls heavily dependent on ambient temperatures.

SOLUTIONS

- Wall Occupancy Sensors
- Reducing plug loads
- Natural ventilation
- Envelope sealing
- Performance Tracking

FIVE YEAR SAVINGS

\$ 217,280

For more information,
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