

# GEATAIN ENGINEERING

## CASE STUDY- 444 East 75th



### BACKGROUND

444E 75 is a 20-story red bricked residential co-op that was built in 1961. Located in the Upper East Side of Manhattan, the property is located on the corner of York Avenue and 75<sup>th</sup> street. Its units are incredibly comfortable and spacious, with upper floors enjoying sunrises over the East River, and lower ones opening onto a private courtyard. Primary heating is provided hydronically by the A.L. Eastmond & Sons boiler to all apartment units through the fan coils. The building's boiler is controlled by an MPC Platinum heat timer and a Digi-Span Elite Series. Lastly, the building has one Marley cooling tower and Carrier chiller with model number 16JB021STM.

### HOW GEATAIN ENGINEERING HELPED

- Surveyed the building's infrastructure to understand existing equipment operations and limitations.
- Identified the need for new boiler controls installation.
- Proposed the implementation of plug outlet controls.

### BENEFITS

- Discovered nine energy savings measures with annual savings of \$53,177.
- More evenly distributed heat throughout the building.
- Reduction of phantom loads in units.



### CHALLENGES

- Energy inefficiency due to old equipment.
- Phantom loads in the apartments.
- Excessive heating and cooling of a space during the more temperate months

### SOLUTIONS

- BMS.
- Night Setback.
- Boiler Controls.
- Ventilation Schedule.
- Annual Boiler Tuning.
- Heat Pumps.
- Plug Outlet Controls.
- Wall Occupancy Sensors.
- Smart Strips.

### FIVE YEARS SAVINGS

\$266,885

For more information,  
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