

# GEATAIN ENGINEERING

## CASE STUDY - 2075 2<sup>nd</sup> Avenue



### BACKGROUND

2075 2<sup>nd</sup> Avenue, at the Franklin Plaza Apartments, is a 20-story, 137,240 square foot co-op residential building located in Manhattan, New York. Constructed in 1961, the building contains 117 residential units. The boiler room in 2081 2nd Avenue contains four low-pressure gas-fired steam boilers which provide steam for space heating and DHW for the building. These boilers are controlled by a Multi-MOD Platinum Heat-Timer. For ventilation, the building has two exhaust fans on the roof that connect to exhaust grilles in the hallways and the bathrooms, the boiler room has an exhaust fan and louvers, and the elevator room has a gravity ventilator.

### HOW GEATAIN ENGINEERING HELPED

- Evaluated climate zone, envelope tightness, and building layout to determine location and sizing of heat pumps.
- Determined building envelope tightness with several different tests to determine building specific heat loss.
- Researched funding sources offered by NYS for each individual energy efficiency measure to help ease financial burden of EEMs.

### BENEFITS

- Provided an all-encompassing funding package to decrease initial capital outlay.
- Simplified and improved operational routines to reduce carbon emissions and energy usage.



### CHALLENGES

- Deterioration of building envelope.
- Excessive heating and cooling of building at night.
- Manual light switches that lack dimming capabilities.

### SOLUTIONS

- Smart strips
- Heat Pumps
- Bi-Level Lighting
- Unit LEDs
- Wall Occupancy Sensors
- Night Setback
- Pipe Insulation
- Building Envelope

### FIVE YEAR SAVINGS

\$332,205

For more information,  
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