

# GEATAIN ENGINEERING

## CASE STUDY- 570 Broome



### BACKGROUND

570 Broome Street is a 25-story residential building that was constructed in 2016. Located in Hudson Square, New York City, the 63,752 square foot, 54-unit property features one-to-three-bedroom loft style residences. Heating is provided by two Laars gas-fired hydronic boilers. Cooling is provided by three Technical Systems chillers. Lastly, domestic hot water is provided by two small Laars gas-fired boilers.

### HOW GEATAIN ENGINEERING HELPED

- Completed extensive amperage study of common area and unit electric panels for electrification sufficiency.
- By considering climate zone, envelope tightness, building layout, and related considerations, Geatain determined the optimal location and sizing of heat pumps.
- A lighting assessment was performed to identify over-lit areas to optimize light bulb replacements..

### BENEFITS

- Provided several alternative paths to comply with LL97-Carbon Emissions law.
- Increased natural ventilation provides considerable fall and spring savings.



### CHALLENGES

- Several of the equipment in the apartment remain on during nighttime.
- Manual light switches are kept on for long periods of time.
- Excessive heating and cooling during the more temperate months.

### SOLUTIONS

- Annual Boiler Tuning.
- Ventilation Schedule.
- Heat Pumps.
- Boiler Controls.
- Delamping.
- Envelope.
- Smart Strips.
- Wall Occupancy Sensors.

### ANNUAL SAVINGS

\$169,095

For more information,  
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