

# GEATAIN ENGINEERING

## CASE STUDY-101 WEST 55<sup>th</sup> STREET



### BACKGROUND

The Claridge at 101 West 55<sup>th</sup> Street is a luxury prewar condominium building constructed in 1925 in the heart of Midtown. The grandiose building's lobby was designed by renowned architect Paul Rudolph and has other retail tenants on the first and second floor. The escalating energy consumption from the antiquated equipment posed a challenge during the energy audit. The building had rudimentary heating controls and the HVAC equipment was beyond its useful life span. The house and recirculation pumps that controlled the water pressure were also nearing the end of its useful lifespan. The overall building was in good condition and had advanced windows that insulated the building well.

### HOW GEATAIN ENGINEERING HELPED

- Analyzed building operations to determine precise recommendations to improve occupancy comfort, streamline operations and lower carbon emissions.
- Determined building envelope tightness with several different tests to determine building specific heat loss.
- Historical maintenance records evaluated to uncover latent equipment deficiencies.

### BENEFITS

- Advanced heating controls show real time energy usage and historic trends to help identify savings opportunities.
- Sealing the elevator shaft prevents unwanted drafts that unnecessarily stresses HVAC systems.



### CHALLENGES

- Exhausted lifespan of HVAC equipment.
- Rudimentary heating controls.
- No bilevel controls.

### SOLUTIONS

- Natural ventilation.
- Unit thermostats.
- Reducing plug loads.
- Tracking operations.
- Current regulator.

### Annual SAVINGS

\$ 55,580

For more information,  
email [tjm@geatain.com](mailto:tjm@geatain.com)