# **GEATAIN ENGINEERING**

## CASE STUDY- 77 West 55th Street



#### **BACKGROUND**

77 West 55<sup>th</sup> Street is a 180,000-square-foot residential building in the midtown region of Manhattan, New York City. Built in 1963, the 183-unit property has a total of 20 stories, along with a newly renovated lobby and newly renovated hallways. The building is primarily heated by a district stream sent to fan coils around the building. One HWR Platinum Heat-Timer with the serial number HWR00P11V058 and an OptiView Control Center control the district steam and heating systems for the property. Each apartment has two fan coils, and there is one York IsoFlow Absorption Chiller to distribute cooling around the building. Ventilation is provided by small and extra-large FloAire exhaust fans for bathrooms and kitchens.

#### **HOW GEATAIN ENGINEERING HELPED**

- Evaluated tightness of several different types of windows within building to help refine capacity of heat pump system.
- Control algorithms offer multiplicative savings opportunities.
- Monthly involvement of ownership helped to align project focus to tailored property needs.

#### **BENEFITS**

- Advanced controls align comfort levels to changes in occupancy throughout the day.
- Advised ownership of opportunities to delay large outlay of capital while complying with Local Laws.



#### **CHALLENGES**

- Wasted energy from building devices not in use.
- Excessive use of HVAC systems.

#### **SOLUTIONS**

- Wall occupancy sensors
- Bi-Level lighting
- Ventilation schedule
- Night Setback
- Smart Strips.
- Plug Outlet Controls.
- LEDs.

### ANNUAL SAVINGS \$254,500

For more information, email tjm@geatain.com