# **GEATAIN ENGINEERING**

# **CASE STUDY-230 Ashland**



## **BACKGROUND**

230 Ashland is a 125,646-square-foot luxury residential building that was constructed in 2007. It is located at the corner of Fulton Avenue, Brooklyn, New York. Two Sellers 300HP boilers, controlled by a Runwise control system, provide low-pressure steam through a two-pipe system at 6 PSIG heating for the building. A rooftop McQuay AHU, model no. CAH008GHAC supplies air to the building and provides heating and cooling in hallways. There is no centralized cooling system, so heating and cooling is based on the occupant's control with an Ice Air PTAC unit with R-410a refrigerant, model no. 5RSAN09-A-RO2-ND.

# **HOW GEATAIN ENGINEERING HELPED**

- Completed extensive amperage study of common area and unit electric panels for electrification sufficiency.
- Considered property orientation and shading to refine heat pump capacity design.
- Evaluated tightness of several different types of windows within building to help refine capacity of heat pump system.

### **BENEFITS**

- Through a few simple setpoint improvements, significant carbon emissions were saved.
- Simple plug outlet savings produce meaningful emission reductions.



# **CHALLENGES**

- Oversized boiler.
- Excessively high distributed steam pressure.
- Lack of heating controls.

### **SOLUTIONS**

- BMS.
- Space LEDs.
- Night Setback.
- Envelope.
- Heat Pumps.
- Wall Occupancy Sensors.

FIVE YEAR SAVINGS \$ 277,485

For more information, email tjm@geatain.com