# **GEATAIN ENGINEERING**

## **CASE STUDY-189-14 CROCHERON AVENUE**



#### **BACKGROUND**

189-14 Crocheron Avenue in Bayside, New York is an apartment building of six stories. The building was completed in 1956 and has two elevators inside. 189-14 Crocheron Avenue does not contain centralized air conditioning or ventilation equipment. The heating system serves all occupied building spaces and is controlled by a heat timer. There are single-pane windows, and most of the lighting is CFL bulbs with some T12 bulbs and few incandescent bulbs.

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

- Measured and quantified the thermal capacity of the building envelope to improve heat retention in winter and air conditioning efficiency in summer.
- Performed a lighting assessment to identify over-lit or under-lit areas, resulting in a 25% reduction in lighting usage.
- Conducted an audit to target the most glaring areas of energy waste or inefficiency, with a focus on outdated HVAC systems.

#### **BENEFITS**

- Identified eight measures with annual savings of \$39,200 per year, all having returns of less than five years.
- Immediate savings and increased lifespan of new, improved equipment, particularly in the heating system.



#### **CHALLENGES**

- · Old equipment.
- · Lighting inefficiency.
- No ventilation or cooling systems.
- Very simple controls.

#### SOLUTIONS

- LED lighting.
- · Sealing air leaks.
- Energy controls.
- Energy dashboard.

### LIFECYCLE SAVINGS \$ 392,000

For more information, email tjm@geatain.com