

GEATAIN ENGINEERING

CASE STUDY- 315 West 70th Street



BACKGROUND

315 West 70th Street is a 253,741-square-foot co-op apartment building located in Lincoln Square, New York City. Built in 1963, the 185-unit property has a total of 16 stories that feature storage, a laundry room, a bicycle room, and a garage. The building is heated by Consolidated Edison district steam, which feeds a heat exchanger through piping within the building chaseway to provide hydronic heating. Two-eight compressor Multistack chillers and two Baltimore Aircoil Company provide the building cooling, and several old tankless Domestic Hot Water (DHW) provide hot water.

HOW GEATAIN ENGINEERING HELPED

- Determined building envelope tightness with several different tests to determine building-specific heat loss.
- Heating percentage and electric percentage analysis revealed core property equipment challenges.
- Analyzed building operations to determine precise recommendations to improve occupancy comfort, streamline operations, and lower carbon emissions.

BENEFITS

- Adjusting ventilation schedules helps prolong equipment life and magnifies savings.
- Revising operating schedules leads to significant carbon reductions.



CHALLENGES

- The overuse of the building's heating and cooling equipment.
- Building ranks in the bottom 21.11% for electrical efficiency among NYC buildings.

SOLUTIONS

- Operations Improvement.
- Plug Loads.
- Natural Ventilation.
- Envelope.
- Interior Lighting Controls.
- Energy Management System.
- Overhead Installation.
- Tenant Load Reduction.

ANNUAL SAVINGS

\$122,975

For more information,
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