Building Developer:
RPM Development

Licensed Professional:
MaGrann Associates, Inc.

Year Certified:
2014

Construction Type:
New Addition & Historical Rehab

Sector:
Mixed-Use & Affordable Housing

GG Green Senior Housing
108 South Broad Street
Woodbury, New Jersey 08096

Technologies Used:
- In-unit gas furnaces (95 AFUE)
- Split-system cooling (13.5 SEER)
- High performance envelope
- Central domestic hot water system (95% efficient)

Building Description:
GG Green Senior Housing is a renovated 4-story, mixed-use historic building, with 55 apartments and retail on the first floor. There are 52 one-bedroom units and 3 two-bedroom apartments.

The existing walls have 1" of closed cell spray foam and R-13 fiberglass batts. The new construction walls have R-19 fiberglass batt insulation between the wood framing and 1" of continuous rigid polyisocyanurate insulation (R-6.5) to reduce thermal bridging. There is 2" of rigid polyiso above the roof deck, and R-30 FG batts in the ceiling. Custom windows to match the historic façade have a U-0.28 and SHGC-0.28.

Apartments have in-unit forced air heating and cooling via efficient right-sized furnaces and split system AC’s with tight ductwork that has less than 8% leakage. ASHRAE 62.2 ventilation is provided by ENERGY STAR certified bathroom exhaust fans, which run at a continuous low-speed and can boost to higher speeds when occupied. Low flow faucets and showerheads reduce both energy and water consumption. Compact fluorescent lighting and ENERGY STAR certified refrigerators, dishwashers, and clothes washers have also been installed.

Outside the apartments, occupancy sensors for lighting have been installed in all common spaces, further reducing electricity use. Energy modeling estimates 28% annual energy cost savings compared to ASHRAE 90.1-2007.