

ENERGY STAR Multifamily High Rise Building Profile

Building Developer:

RPM Development

Licensed Professional:

Doug McCleery, MaGrann Assoc.

Year Certified:

2016

Construction Type:

New Construction

Sector:

Affordable Housing

999 Broad Street

999 Broad Street
Newark, New Jersey 07114



Technologies Used:

- Low-E Vinyl Windows with 0.32 U-value
- 96% AFUE in-unit gas furnaces
- SEER 14 split-system AC
- 96% efficient central gas DHW
- ENERGY STAR Appliances



Building Description:

999 Broad Street is a 5 story, 87 unit building in Newark, New Jersey, with a mix of one, two, and three bedroom ENERGY STAR Certified units.

The apartments have low-E double-pane vinyl windows (U-value of 0.32 and SHGC of 0.40), R-38 blown cellulose roof insulation, and a combination of R-19 fiberglass batt and R-5 rigid insulation in wall cavities. The units were tested at airtightness levels of 0.20 CFM50 per square foot of enclosure, surpassing program requirements by 44%. The level of compartmentalization will reduce resident energy costs, and improve comfort and indoor air quality.

All apartments have a 95 AFUE in-unit furnace, with SEER 14 split AC units. All ducts are tightly sealed, resulting in leakage less than 8 CFM25/100 ft². Central domestic hot water is provided by a 96% efficient gas-fired boiler. The gas needed to heat the water is reduced through the use of Water Sense certified showerheads, low-flow faucets, and ENERGY STAR certified clothes washers.

ENERGY STAR certified refrigerators and exhaust fans, as well as efficient lighting fixtures are installed to further reduce the electricity consumption in the apartments of the building.

The project is modeled with projected cost savings of 24% over a building that meets ASHRAE Standard 90.1-2007.