ENERGY STAR Multifamily High Rise Building Profile

Broadway Genesis

711-715 Broadway
Newark, New Jersey 07104

Building Developer:

HELP USA

Licensed Professional:

Doug McCleery, MaGrann Associates

Year Certified:

2014

Construction Type:

New Construction

Sector:

Affordable Housing

Technologies Used:

- ENERGY STAR certified air source heat pumps
- ENERGY STAR certified vinyl-framed windows
- ENERGY STAR certified appliances & exhaust fans

Building Description:

Broadway Genesis Apartments is a four story multifamily property,with 40 one-bedroom units for low-income individuals over the age of 55.

The foundation walls are insulated using 1" of continuous XPS (R-5) and R-13 fiberglass batts between metal framing. The wood-framed above grade walls have R-21 fiberglass batt insulation in between the framing. There are 4" of rigid polyisocyanurate insulation above the roof deck, providing a roof R-value of 26. The vinyl-frame ENERGY STAR certified windows are double-pane with a U-value of 0.29 and a SHGC of 0.28. The envelope was tested for compartmentalization and all apartments tested were less than 0.30 CFM50 per SF of enclosure.

Each apartment has an ENERGY STAR certified refrigerator, dishwasher, and 1.5 ton ENERGY STAR certified heat pump, with 8 HSPF and 15 SEER ratings. The ductwork was tested to have leakage less than 8 CFM25/100 SF. Domestic hot water is provided by in-unit electric storage water heaters (EF0.93) and water use is reduced through the use of WaterSense certified toilets and showerheads, and low-flow lavatory faucets (1.5 gpm). ASHRAE 62.2 whole-house ventilation and local exhaust for bathrooms is met through ENERGY STAR certified bathroom ceiling exhaust fans that run at low-speed continuously and increase upon occupancy. Kitchen exhaust is vented directly to the outdoors.

CFL and LED lighting is installed throughout the building and all common and exterior areas are equipped with automatic lighting controls.

The building is projected to have 22% lower annual energy costs than a building built to meet ASHRAE Standard 90.1-2007.