

ENERGY STAR Multifamily High Rise Building Profile

The Greens at Irvington Mews

Building Developer:

Enterprise Housing Corporation

4300 Frederick Avenue
Baltimore, Maryland 21229

**Licensed Professional:**

Century Engineering

Year Certified:

2014

Technologies Used:

- Central VRF heat pumps provide both heating (3.3 COP) and cooling (16.3 IEER)
- High performance envelope

Construction Type:

New Construction

Sector:

Senior & Affordable Housing

**Building Description:**

The Greens at Irvington Mews is a 4-story, 100 unit building for low-income and moderate income seniors and adults with disabilities. There are a mix of 1-bedroom and 2-bedroom units and other common areas for residents.

A combination of ½” of closed cell spray foam and 5” of blown in fiberglass were used to cost effectively insulate and air-seal the 2x6 wood-framed walls. There is 6” (R-32.5) of rigid polyisocyanurate insulation at the roof deck. Argon filled, double-pane, vinyl frame windows have a U-0.29 and SHGC-0.23. The apartment ductwork and envelope were tested to meet the standards of the ENERGY STAR Multifamily High Rise Program.

Apartments have in-unit forced air heating and cooling via central heat pumps that utilize variable refrigerant flow to attain high efficiencies. ASHRAE 62.2 ventilation is provided by ENERGY STAR certified bathroom exhaust fans, which are operated by a timer. Kitchen range hoods are ducted to the outside. Low flow faucets and showerheads reduce both energy and water consumption. Compact fluorescent lighting, ENERGY STAR certified refrigerators, and ENERGY STAR certified dishwashers have also been installed.

Outside the apartments, occupancy sensors for lighting have been installed in most common spaces, further reducing electricity use. Energy modeling estimates 24% annual energy cost savings compared to ASHRAE 90.1-2007.