

ENERGY STAR Multifamily High Rise Building Profile

Bon Secours Gibbons

900 Desoto Road
Baltimore, Maryland 21223

**Building Developer:**

Enterprise Homes, Inc.

Licensed Professional:

Magda Westerhout, Marks-Thomas Arch.

Year Certified:

2016

Construction Type:

New Construction

Sector:

Affordable Housing

Technologies Used:

- Low-E Vinyl Windows with 0.30 U-value
- 3.64 COP VRF heating
- EER 11.2 VRF cooling
- 95% efficient electric DHW
- ENERGY STAR Certified Appliances

Building Description:

Bon Secours Gibbons is a 4 story, 80 unit building in Baltimore, Maryland, 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 0.3 and SHGC of 0.31), R-38 batt roof insulation, and a combination of 1" closed cell spray foam and R-19 batt insulation in the 2x6 wood-frame wall cavities. The units were tested at airtightness levels of 0.23 CFM50 per square foot of enclosure, surpassing program requirements by 23%. The level of compartmentalization will reduce resident energy costs, and improve comfort and indoor air quality.

Central VRF heat pumps systems, with 3.64 COP and EER 11.2, provide space heating and cooling to the building. Ductwork distributing the conditioned air in units are tightly sealed, resulting in less than 8 CFM25/100ft². Domestic hot water is provided by 95% efficient electric water heaters. The energy 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 26% over a building that meets ASHRAE Standard 90.1-2007.

