

ENERGY STAR Multifamily High Rise Building Profile

Building Developer:

Bridgeport Neighborhood Trust

Licensed Professional:

Paul B. Bailey Architects, LLC

Year Certified:

2014

Construction Type:

New Construction

Sector:

Affordable Housing

The Gateway at 570

570 State Street
Bridgeport, Connecticut 06604

Technologies Used:

- 30 Combination Gas boilers provide both space heating and DHW to each unit; 30 SEER 14.5 split system AC units provide cooling
- Three 97% AFUE gas furnaces (common spaces)
- Seven Variable Speed Mini-Split Heat Pumps, 10 HSPF, 17-26 SEER

Building Description:

The Gateway at 570 is a five story, mixed-use building with office space for Bridgeport Neighborhood Trust on the first floor and 30 one-bedroom, affordable, supportive housing units above.

The Gateway's slab-on-grade is insulated for two feet horizontally around the whole slab, using 3" of XPS (R-15). The first floor walls are framed with metal studs and the upper four floors are of wood construction. The exterior walls have R-21 fiberglass batt insulation in between the framing and R-5 continuous XPS on the exterior for reduced thermal bridging. There is 14" of blown fiberglass in the ceilings of the top floor units providing a roof R-value of 49. The vinyl-frame ENERGY STAR certified windows are double-pane with a U-value of 0.30 and a SHGC of 0.29. The high-performance 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, SEER 14.5 central air conditioner, and a 93% efficient gas fired boiler that provides both domestic hot water and space heating via hydro-coil units. The ductwork was tested to have leakage less than 8 CFM25/100 SF. ASHRAE 62.2 whole-house ventilation and local exhaust for bathrooms is met through one central continuously exhausting fan that pulls from all the bathrooms. For intermittent local exhaust in the kitchen, ENERGY STAR certified fans are installed. In order to comply with ENERGY STAR's MFHR program, the kitchen exhaust risers leading up to the rooftop were tightly sealed using Aeroseal and tested for leakage.

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

