

Commissioning - Multifamily Highline 23 Condominium 515 West 23rd Street New York, New York

Program

NYSERDA New Construction Program

Scope of Services

- LEED Fundamental Commissioning
- LEED Enhanced Commissioning

Level of Involvement

Commissioning Authority

Facility Size

42,395 sq. ft.

Facility Type

Luxury High Rise

Project Goals

Targeting LEED-NC v2.2 Gold Certification

The Highline 23 Condominium is 14 story building constructed on a narrow lot adjacent to the Highline Park on West 23rd Street in Manhattan. The building is a cutting edge design with a sculptured form to provide views of the park and Manhattan. The façade is a glass curtain wall constructed with high performance glazing with a low solar heat gain coefficient (SHGC) and U-value to optimize building envelope performance. Roof and opaque walls are insulated above code requirements. The amount of glazing enables a substantial use of day lighting within the space.

The building is heated and cooled with a vertically stacked, water source heat pump system that includes a cooling tower on the roof and condensing gas fired boilers to provide supplemental heat when required. Condenser and heating hot water pumps are controlled by variable speed pumps that reduce electric use concurrently with a reduction in the space conditioning load. Lighting includes a mix of energy efficient fluorescent fixtures and controls. Ventilation is provided by a mix of operable windows and mechanical fans with heating and cooling coils. The residential kitchen exhaust has the ability to be ramped up by a variable speed fan, if requested.



Highline 23 Condominium

Commissioning occurs throughout the entire course of the project, from the development of the Owner's Program and Basis of Design, through the traditional design and construction phases, to acceptance phase at the end of construction. The primary goal of commissioning is to deliver a fully functional, fine-tuned building with complete documentation and an adequately trained operating and maintenance staff. Thorough system commissioning ensures that building systems perform in conformity with the design intent, and furthermore, provides the operations and maintenance staff with the information, documentation and training necessary to keep the system operating at peak efficiency and effectiveness for the life of the system.

The commissioning activities included verifying that the proper project documentation had been delivered and that personnel were properly trained on the equipment. We ensured that the start-up reports and TAB reports were done and followed by functional testing that demonstrated that the equipment and systems were performing in accordance with the design intent.