



511 E 86th Street - Passive House High-Rise Tower

EP Engineering has teamed up with JBS Project Management, Sky Management and Arquitectonica to design a ground up 128,000 square foot 23 story Passive House residential building, complete with ground floor retail, gym, laundry, exercise facility, media & recreation rooms, golf simulator, and pet spa. The building will be constructed to Passive House standards and will utilize energy saving measures such as an airtight envelope construction, high efficiency variable refrigerant heating and cooling, high efficiency condensing water heaters, and high efficiency energy recovery.

Challenges:

- Coordinating Passive House requirements with new MEP systems to ensure the energy model meets the rigorous requirements for building certification.
- Considerable coordination of outside and exhaust air from the energy recovery unit ducted to each and every room and bedroom for continuous indoor air ventilation of each zone.
- Maximizing interior space and ceiling by using a soffited apartment design while still providing optimal heating and cooling to all zones.

Achievements:

- High efficiency Passive House buildings typically use approximately 80% less energy than similar residential buildings.
Passive House construction affords much greater level of comfort to occupants
- by providing consistent temperature throughout an apartment and better indoor air quality.
- Minimizing the spatial requirements of the cellar utility rooms and MEP shaft spaces to allow large amenity spaces to be provided to the building's residents.

Award:

NYSERDA's Buildings of Excellence Award 2019

Locations:

511 E 86th Street
New York, NY 10028

Project Size:

128,000 SF

