



202 East 23rd Street

Passive House High-Rise Tower

EP Engineering provides full MEP engineering services for SMA Equities' new high-rise mixed-use development located on East 23rd Street. The 20-story, 90,000 SF, structure will yield 80 market rate units and 28 affordable units, ranging from studios to two-bedrooms. Working alongside Hill West Architects, Steven Winter Associates and CHA Companies, the building was designed to achieve Passive House Certification, resulting in an energy efficient building with superior indoor air quality and very low heating and cooling requirements. The MEP systems include variable refrigerant flow heat recovery systems, passive house certified energy recovery ventilators, emergency gas generator and high-efficiency condensing type hot water heaters

LOCATION

202 E 23rd Street,
New York, NY 10010

BUILDING SIZE

20-Story Building,
90,000 SF

CHALLENGES

- Achieving precise balance between supply and exhaust air, due to tight construction associated with Passive House Projects.
- Coordinating Passive House requirements with new MEP systems to ensure the energy model meets the rigorous requirements for building certification.
- Minimizing floorspace required by MEP systems saving valuable square footage for the residences.

ACHIEVEMENTS

- Passive House construction affords much greater level of comfort to occupants by providing consistent temperature throughout an apartment and better indoor air quality.
- High efficiency Passive House buildings typically use approximately 80% less energy than similar residential buildings.
- Separating domestic water plants into a high zone & low zone to eliminate the need for water pressure reducing valves within the apartments.

