As the world’s first residential high-rise built to Passive House standards, the Residential Building exemplifies Cornell Tech’s to setting new benchmarks in sustainability and innovation. It will be the on-campus home of Cornell Tech students and faculty.

**AN ICONIC MARKET**

Designed by Handel Architects, the Residential Building will provide a comfortable living experience, reinforcing the social and intellectual connectivity at the heart of Cornell Tech’s mission. Collaborative spaces dot the building, both inside and out. Affordable, sustainable, and built to last, the building is geared toward students and faculty who want to live on campus in a traditional residential setting, but also want to connect to the New York experience.

Soaring to 270 feet into the sky, the Residential Building will act as an iconic marker -- especially from vantage points such as Manhattan’s FDR Drive and along the Queens waterfront. With the help of special color-changing paint, the metal panel façade will shimmer in the light, naturally shifting hue from silver to warm champagne. Residents approach the building from a pathway that feeds into the campus center along Tech Walk. After passing through the front entry, they are drawn into the high-ceilinged lounge. The interior lounge will offer residents a place to socialize with a stunning view over the East River. Viewed from the outside, the transparency of the lounge creates a lasting visual connection between the interior life of the building and the main campus.

**PASSIVE HOUSE STANDARDS**

Considered the most rigorous energy efficiency standard in the world, Passive House buildings consume 60 – 70 percent less energy than typical building stock, surpassing modern standards like LEED and NYSERDA. To achieve Passive House standards, the façade, constructed of a prefabricated metal panel system, acts as a thermally insulated blanket wrapping the building structure.

At the southwest façade, which faces Manhattan, the exterior opens to reveal a louver system that extends the entire height of the building. This reveal is designed to be the “gills” of the building, literally providing an enclosed exterior space where the heating and cooling equipment live, allowing the building system to breathe. Low VOC paint, which limits off gassing and improves indoor air quality, will be used throughout the building, along with many other sustainability-focused design elements. Compared to conventional construction, the building is projected to save 882 tons of CO2 per year—equal to planting 5,300 new trees.