



## Residential + Retail



## Specifications

- 15-story prefabricated tower
- 112 units
- 87,800 square feet



## Network Needs

- Seamlessly integrate with fast-moving prefab construction
- Reduce tech space needs
- No tech closets on floors
- No cable trays
- Reduce copper wiring volume
- DC power for LED lighting and in-unit applications
- Easily monitor and control smart building systems
- Provide outstanding user experience for tenants

# 303 Battery

**Future-ready FTTE enables fast, net-zero prefab build**  
Fiber to the Edge = Software-Defined Network + PoE and Data

## The Customer

303 Battery is one of the world's first net-zero high-rise apartment buildings. Located in Seattle, Washington, it stands 15 stories tall with 112 living units plus ground-floor retail. Power for the building is generated by solar panels covering the roof and exterior walls, backed by a battery bank for overnight and outage supply. The bandwidth and power to the unit over a software-defined LAN design was made possible through close collaboration between SDC Next Consulting and Corning.

## The Challenge

303 Battery's teams had two main goals: achieve net zero and get the building designed, constructed, and rented quickly. Seamlessly monitoring and controlling a smart building requires a very large data capacity. However, unlike traditional multistory buildings, this prefab would have no centralized riser. All the building's components were manufactured offsite and attached to the frame onsite. To maximize environmental efficiency and ROI, the design needed to make the most of every inch.

**“From a sustainability standpoint, the FTTE solution is fantastic. Fiber gives us the utmost flexibility to serve the needs of today and tomorrow. I’ve worked with Corning for about 30 years. It’s always been terrific.”**

— Steve Corcoran, President of SDC Next Consulting





### Solar Power System

- 616 panels
- Battery bank
- 100W DC (48V) to each room
- 5+ Wi-Fi connected devices per living unit

### Products Deployed

- Corning Fully Managed SD-LAN
- Corning ActiFi® Composite Cable
- CIP (Corning Intelligent Power)

### 70% smaller cable bundle

1 ActiFi Composite Cable per unit/zone

### 60% less copper

By volume vs traditionally wired building, based on reduced AC cable infrastructure needs

### Learn more at

[Corning.com/hospitality](https://www.corning.com/hospitality)

# Corning Everon® Network Solutions

## The Solution

Our Corning Everon® Network Solution is a fully managed, active Ethernet Software-Defined LAN. It's enabled by remote power via versatile CIP (Corning Intelligent Power) plus Corning ActiFi® Composite Cable that combines single-mode fiber and copper conductors under the same cable jacket.

## Horizontal LAN (FTTE)

303 Battery's design began with the utilities. By prioritizing the network, the building could fully leverage the efficiencies of fiber from the start and have the capacity and flexibility to easily evolve over time without recabling. Unlike a traditional network that connects the rooms on each floor to an intermediate distribution frame (IDF), this FTTE design delivered fiber and DC power and PoE to each unit directly from the main distribution frame (MDF) via a single composite cable. Applications supported in this design include: LED lighting, Wi-Fi, safety, environmental, access control, and other smart building systems. Having the ability to adopt an all-DC infrastructure allowed a significant reduction in copper wiring volume and reduced the power consumption footprint to support the objectives of this net-zero building.

**“We were excited to be part of this net-zero project. Converging all the siloed devices in a building into a single platform run from a central location let us eliminate a lot of wasted space and meet 303 Battery's goals.”**

– Rick Ruiz | Senior Field Sales Engineer, Corning Optical Communications

# CORNING

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