

Project Spotlight

Multi-Phase Scalable EV Infrastructure Deployment at The Fordham



Overview:

Omega Electric, a division of Temperature Service Company, engineered and deployed a comprehensive electric vehicle (EV) charging infrastructure modernization at The Fordham in downtown Chicago. By strategically expanding the building's power distribution networks from the basement to the 10th floor, the team provided immediate dedicated charging capabilities for residents while establishing a scalable, future-ready framework.

Client Testimonial:

"Omega Electric's meticulous planning and execution provided our residents with a state-of-the-art EV charging amenity. They navigated the complexities of our active parking structure flawlessly, delivering a massive infrastructure expansion safely and without disrupting our daily operations."



Project Details:

Location: The Fordham, River North, Chicago, Illinois
Type: Commercial Electrical Infrastructure, Electric, EV Charging Solutions, Infrastructure Engineering, Multi-Phase Modernization
Timeline: Executed successfully under meticulous multi-phase logistical planning
Impact: Established a scalable framework delivering dedicated 30-amp circuits to support 63+ EV charging stations across seven garage levels

Challenges:

- Equipping a multi-level concrete parking structure with dedicated electrical capacity without disrupting daily resident operations
- Safe and precise routing of multi-floor conduit and equipment placement on sloped parking garage surfaces

Solutions:

- Executed a multi-phase modernization by tapping into the main switchboard to feed a new central 1200A panel on the 10th floor, stepping down power to sub-panels on levels 5 through 9.
- Performed comprehensive structural concrete slab scanning prior to all multi-floor penetrations to guarantee the physical integrity of the facility.
- Deployed a robust, garage-wide wireless network extension integrated with the existing building connection for charging unit telemetry and smart load management.
- Installed heavy-duty distribution gear and high-efficiency transformers elevated 6 to 12 inches above the finished floor for stability on sloped surfaces.

Execution:

- Streamlined processes, from permits to installation, under the supervision of TSC's/Omega's engineering team.
- Rigorous testing and ongoing progress updates.
- Multiple-year workmanship warranty to ensure quality & reliability.

Key Equipment:

- Siemens P5 Series Panelboard (1200A, 480Y/277V) with Dynamic Arc-Flash Sentry (DAS)
- Siemens P3 Series Panelboards (800A, 208Y/120V)
- Siemens P2 Series Sub-Panels (200A and 400A, 42-circuit configs)
- 300 KVA and 150 KVA 3-Phase High-Capacity Transformers
- Garage-Wide Wireless Access Point Networking Hardware

Results and Impact:

- Delivered dedicated 30-amp electrical circuits to individual parking spaces across seven active garage levels.
- Maintained continuous facility operations with zero impact on the high-rise's structural elements.
- Modernized the building's infrastructure to meet immediate tenant EV demand while future-proofing the property for continued adoption.

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