

## **Category: 5 – Best Building Project – Specialty Contractor (\$2–\$6 Million)**

**Contractor: Greiner Electric**

**Project Name: Union Tower West**

Union Tower West, a 19-month design–build project at 1801 Wewatta Street in Denver culminated in a dramatic new development, a core and shell encompassing a boutique hotel, a restaurant, and coveted office space located next to Union Station in Denver’s LoDo neighborhood.

The 312,000-square-foot building features a ground level that serves as the hotel and office lobbies as well as offering retail and dining services to local residents and workers. The project includes three levels of parking garage and four levels comprising approximately 40 hotel guestrooms each. This is capped by four levels of office space.

This innovative venture was the result of 46,685 man-hours on the part of Greiner Electric, which boasted an impressive zero time lost to accidents. This total included 5,485 man-hours (which approximated 11% of overall project man-hours) in off-site prefabrication as well as 249 man-hours devoted to BIM coordination and preplanning the prefabrication builds. As an example, by prefabbing the underground feeder ductbank it shaved 2 weeks off of the project schedule.

Greiner’s crews installed 496,770 linear feet (94.08 miles) of wire, 95,750 feet (18.13 miles) of which was installed within concrete decks to eliminate overhead work and working over Greiner’s trade partners on the project. This required constant coordination between the design and installation teams to insure accurate connections in the midst of simultaneously occurring design and construction work.

As with any complex design–build undertaking, Greiner had to remain flexible in response to ongoing design changes as the project developed. The company completed \$1.2 million in change orders—with no time extensions to the schedule.

Collaboration—both within and between teams—was imperative to the success of this project. Weekly, and even daily, meetings were held among trade partners to constantly stay on top of any necessary design changes and stay in front of schedules. This attention to detail and focus on cooperation saved time by eliminating rework, and it saved money for the customer.

Of course safety was a primary concern for everyone involved. Weekly safety meetings and ongoing discussions were a priority, and as such, Greiner's team employed a task-specific method of procedures that identified risks and hazards in addition to all known constraints. This involved daily overviews of risk assessments identifying new constraints or hazards identified from the prior day's work. This internal assiduousness was supplemented by weekly safety audits performed in conjunction with trade partners and an atmosphere that encouraged open discussion to correct and educate all partners on the dangers and risks at hand.

In addition, as part of Greiner's commitment to safety and to the development and growth of its employees, on this project, younger tradesmen were given the tools and training to empower them to keep safety as a priority, which in turn led to a successful project.

Union Tower West is a LEED-certified structure that aims to offer office tenants—as well as hotel guests—top-quality electrical load and redundancy in addition to the most advanced telecom and technology and top-of-the-line HVAC. This all begins with the electrical systems. Greiner took the initiative in offering the customer high-value engineering solutions in terms of both product used and construction installation options.

Overall, this approach saved the customer \$120,000 in product and installation costs. Greiner's team worked with the customer up front, taking the time to explain different processes and introduce products that were not “off the shelf,” but that met the customer's stated goals for the project of sustainability and quality.

