

COMMERCIAL ELECTRICAL PANEL UPGRADE

**800A, 480V Power Distribution Upgrade for
Research Laboratory Renovations**



Project Highlights:

- 800A, 480V commercial subpanel installation
- Three-phase electrical distribution
- Laboratory renovation support
- Commercial electrical infrastructure upgrade
- Feeder installation and terminations
- Future-ready electrical capacity

Scope:

- Installation of new 800A, 480V subpanel
- Feeder conduit installation
- Large feeder conductor installation and termination
- Panel mounting and anchoring
- Equipment grounding and bonding
- Circuit identification and labeling
- Testing and commissioning
- Coordination with ongoing laboratory construction

Project Overview

BD Electrical completed the installation of a new 800-amp, 480-volt commercial electrical subpanel at a research facility to support ongoing laboratory renovations. The project expanded the building's electrical distribution system, providing additional capacity for new laboratory equipment, HVAC systems, and future tenant improvements.

Working within an occupied research environment required careful planning to minimize disruption while maintaining safe access to existing electrical infrastructure.



The Challenge

Research facilities continually evolve as laboratories are renovated and new equipment is introduced. These upgrades often require significantly more electrical capacity than the original building infrastructure was designed to support.

The new distribution equipment needed to be installed within an active facility while maintaining code-required working clearances and coordinating with other trades completing the laboratory renovation.

Because research environments frequently operate around the clock, electrical work had to be carefully planned to minimize disruption to facility operations.

Our Solution

BD Electrical installed a new 800-amp, 480-volt distribution panel to provide reliable power for the laboratory renovation project and future electrical expansion.

The installation included:

- Secure installation of commercial switchboard equipment
- Large-capacity feeder installation
- Professional conduit routing
- Code-compliant grounding and bonding
- Clear equipment labeling
- Coordination with the facility's renovation schedule

The completed installation provides a robust electrical distribution point capable of supporting new laboratory equipment, HVAC systems, and future branch circuit expansion.

Why Panel Upgrades Matter

Electrical distribution upgrades are often the foundation of successful commercial renovations. As facilities add new equipment and increase electrical demand, existing panels may no longer have sufficient capacity.

A properly designed panel upgrade provides:

- Increased electrical capacity
- Improved reliability
- Additional space for future expansion
- Simplified maintenance
- Support for modern laboratory equipment
- Compliance with current electrical codes

Whether supporting laboratory renovations, manufacturing expansions, or tenant improvements, electrical distribution infrastructure must be designed with both present and future needs in mind.