



Whole Building Commissioning Services



We offer commissioning services to provide a life-cycle level of service.

The M+NLB Difference

Mazzetti Nash Lipsey Burch (M+NLB) offers Whole Building commissioning services supported by over 160 engineering design professionals. These services are outside of the traditional boundaries of engineering design and are provided to give you a comprehensive approach to facility conception, design, system testing, and operation.

The key to our commissioning team is our people. All of our professionals have served as architectural engineers, mechanical and electrical engineers, facility managers, clean and toxic process and telecommunications discipline leaders. Couple that with a highly experienced engineering staff, and you have a powerful consulting and problem-solving combination.

Commissioning Expertise

M+NLB provides Whole Building and MEP (Mechanical, Electrical, & Plumbing) Engineering Commissioning. Our firm has completed the commissioning of over 70 facilities covering over 5,000,000 square feet of space and \$3B worth of construction.

Our work spans the mission-critical, acute/ inpatient healthcare, biotechnology/pharmaceutical, institutional, food process and commercial building environments.

What is Commissioning?

Commissioning is the systematic application of quality control procedures to produce a building that operates per the design intent. Typical outcomes of a properly commissioned building include:

- Increased reliability
- Equipment that is maintainable
- Energy efficient operation
- Fully trained operating staff

Why Commission?

- No tolerance for unexpected downtime
- Validate operation and performance
- Identify failure modes and test multiple scenarios
- Confirm inter-operability of systems
- Optimize operation
- Jurisdictional requirements
- LEED requirement



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Commissioning Goal: Deliver a project that works as designed to an owner who understands its operation.



Commissioning Deliverables

With our experience in all aspects of the commissioning process, we have produced a variety of deliverables, including:

- Owner Project Requirements: Develop project requirements as the foundation of the basis of design and contracting conditions
- Design Peer Review: Review design deliverables and provided comments during design phase
- Measurement & Verification Plan: Develop M&V Plan and establish metering requirements
- Sequence of Operations: Review BAS/DDC Controls and Emergency Power Plant Program Logic Control
- Cx Plan: Author the Commissioning Plan
- Specifications: Author and Integrate Commissioning Specification for construction team
- Pre-functional Tests & Startup: Review sub-contractor testing and startup forms and provided additional requirements
- Functional Tests: Author functional test scripts and lead testing procedures
- Hands-on Tests: Manage functional testing and document results; lead retesting procedures
- Data/Trending: Use data loggers or EMS trend logs for testing
- Training: Develop or approve staff training
- Review O&Ms: Review completed Operation & Maintenance manuals
- Supervise 3rd Party Testing Services: Coordinate and manage additional owner's testing consultants (for example infra red equipment scanning, testing & balancing, circuit breaker adjustments)

- Commissioning Report: Provide a comprehensive project manual with all testing reports and summary
- Building Envelope Testing: Provide testing for air infiltration/exfiltration using pressure test and/or IR scanning.

What We Can Do

Cx Services we provide:

- Whole Building Commissioning
- Mechanical, Electrical, & Plumbing Engineering Commissioning
- Recommissioning and Off Season (6 months post construction) Commissioning (Retrocommissioning)
- Monitor Based Commissioning (MBCx)
- LEED Commissioning & Consulting
- IPMVP Consulting
- Design Review for Operations and Maintenance Efficiency
- Identification of Single Points of Failure
- Development of System Sequences to Ensure Consistent and Efficient Operation
- Oversight of Operations Staff Training
- Energy Efficiency Review and Development of Energy Conservation Measures
- Identification of Utility, State and DOE Rebate Opportunities
- Facility Monitoring and Forensic Evaluation
- Operations Staff Supplementation

Let Us Know How We Can Help

For more information about M+NLB's Commissioning Services, please call David Lennon at 1.888.340.5987. We also welcome you to visit our website at www.mazzetti.com.