# emanuelson-podas consulting engineers

## **Overview:** Commissioning

The EP commissioning (Cx) department provides a broad array of commissioning and related services to clients in a range of industry sectors. EP is one of the few select firms to receive the Certified Commissioning Firm (CCF) designation from the Building Commissioning Association (BCxA).

Led by Director of Commissioning and 30-year certified professional Rick Dale, the EP commissioning department focuses on delivering comprehensive project verification and documentation services for facilities and systems. In each instance, the goal is to not only ensure that the Owner's Project Requirements are met, but also that opportunities for efficiencies and longevity are realized, and overall project performance satisfaction is obtained.

EP's four-phase process for commissioning (pre-design, design, construction and occupancy and operations) ensures that it meets ASHRAE guidelines and the owner's expectations with meticulous fulfillment.



LIFE TIME FITNESS // Life Time Fitness Architecture // Multiple locations



CATHOLIC CHARITIES / HIGHER GROUND & DOROTHY DAY PLACE // St. Paul, Minn.

### **Commissioning: Process Overview**

#### 1. PRE-DESIGN PHASE

- · Select a commissioning lead
- Pre-Design Phase commissioning meeting
- · Assist in developing the Owner's Project Requirements (OPR)
- Develop initial commissioning plan

#### 2. DESIGN PHASE

- Design Phase commissioning meeting (if Pre-Design meeting did not occur)
- Assist in development of or review of the Basis of Design (BOD)
- Perform commissioning-focused design review
- Update commissioning plan
- Develop commissioning requirements for the specification
- Begin planning and development of the pre-functional and functional performance testing documents, systems manual and training requirements
- Initial commissioning issues log

### Services Provided:

- · Commissioning plans, reports and documentation generation
- LEED Fundamental and Enhanced
- Pre-functional installation verifications
- Functional operational testing of building systems and equipment
- Review of commissioned systems for maintainability and serviceability
- Post-occupancy and warranty reviews
- Risk-based commissioning of facility systems requiring validation

#### **3. CONSTRUCTION PHASE**

- Construction Phase kick-off meeting
- Conduct periodic site observations
- Review submittals, monitor development of shop and coordination drawings
- Review O&M manuals
- Perform ongoing construction observation
- Perform installation verification checks
- Perform functional testing
- Perform diagnostic monitoring
- Develop commissioning report and systems manual
- Develop recommissioning plan
- Verify and review training of owner's staff
- Update ongoing commissioning issues log

#### 4. OCCUPANCY AND OPERATIONS PHASE

- Review operations and maintenance documents
- Perform seasonal/deferred testing
- Perform near warranty-end review
- Finalize commissioning issues log
- Clean room commissioning
- Complete system integration of facility equipment
- Schedule coordination
- Warranty review
- Data center assessment
- Thermal imaging
- Energy audits
- Facility assessments



### **RICK DALE, CCP, CxTS**

Director of Commissioning rdale@epinc.com

- 30+ years' experience in facilities operation and maintenance
- Certified Commissioning Professional (CCP)





#### SAMPLE PROJECT HISTORY:

EP's commissioning expertise extends across industries and around the globe and across industry sectors:

- Church and Worship Spaces
- Corporate and Office
- Fitness and Health Clubs
- FDA Facilities
- Manufacturing and Industrial
- Medical and Health Care
- Multi-Family Housing
- Park and Community Spaces
- Public and Municipal Buildings



For 60 years we've worked side-by-side with exceptional architects, contractors and business owners. In each case, we've worked to deeply connect with every individual involved in the project. The result is a track record of delivering creative, efficient, sustainable building solutions that leave all involved delighted.

Ready? Let's get started.



**GET IN TOUCH** 

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- Member of Building Commissioning Association (BCxA)