

# New Construction Commissioning

## YOUR PROJECT CHALLENGES

### DEFINING PROJECT REQUIREMENTS

Projects often begin the design phase with an incomplete understanding of the building owner's objectives and user needs. Meeting project goals is challenging without clearly defined criteria for success.

### REVIEWING A/E DESIGNS

Despite working alongside top-tier A/E firms, valuable opportunities for enhancing the overall project design often surface **only** once construction has begun, making potential improvements more costly and impractical.

### CONSTRUCTION PHASE INSTALLATION VERIFICATION

Seemingly minor errors during installation and startup can often go undetected even past the warranty period. When identified late in the process, these issues can negatively impact occupant comfort, burden facilities personnel, and are far more costly and disruptive to resolve than when caught early.

### BUILDING CONTROLS TESTING

Modern buildings are complicated, and the apex of this complexity is the building control system. Controls are all essentially custom-built, leaving a wide margin for errors. Problems appear not only at startup but also throughout the warranty period as seasons change and normal use patterns begin.

### PERFORMANCE MONITORING & MBCx

Once the warranty period expires, monitoring of the building's performance usually ceases, and any significant performance deficiencies may go undetected. These issues often are only revealed once energy bills soar and budgets are exceeded, causing frustration and financial strain.

## OUR CONSULTING VALUE

By working closely with project stakeholders **before** design, we can help identify and document the Owner's Project Requirements (OPR), establishing the criteria for achieving project success.

Through third-party design review, we can help identify ways to reduce construction costs and make the final building more efficient and easier to operate. This can help to avoid the need for changes mid-construction, which are usually more costly and disruptive.

Our first-instance and progressive review of building systems installation can identify problems early during the construction process. Early detection enables contractors to address problems with minimal cost and to prevent adverse impacts to the project schedule or system reliability down the road.

Functional performance testing for building controls is a methodical process that puts systems through their paces to reveal potential problems before they cause disruption or failure in real-world conditions. Occupant comfort and reliability are drastically improved, and callbacks are reduced.

Monitoring-Based Commissioning (MBCx) extends beyond the warranty period, providing periodic or continuous review of building performance, flagging issues, optimizing efficiency, and empowering facility personnel to prioritize issues with high energy costs or operational risks.