

# QUALITY ASSURANCE & QUALITY CONTROL ADD-ON SERVICE OFFERINGS



Quality Assurance (QA) and Quality Control (QC) ensure that construction projects are executed safely, correctly, and in alignment with engineering, regulatory, and owner requirements. **QA** focuses on processes that prevent defects, while **QC** focuses on inspecting and verifying that work meets established standards.

## QUALITY ASSURANCE

### A. Planning & Documentation

- \* Create Quality Management Plan with roles, duties, & workflow.
- \* Use current revisions of drawings, specifications, & procedures.
- \* Conduct pre-construction review of designs & standards.

### B. Standards & Compliance

- \* Align teams with codes, requirements, & product guidelines.
- \* Develop standardized procedures & construction checklists.

### C. Training & Competency

- \* Provide training for installation, safety, & inspection practices.
- \* Verify qualifications for specialized work.

### D. Risk Prevention

- \* Perform quality risk assessments to identify critical activities.
- \* Review supplier quality documentation before materials ship.

## QUALITY CONTROL

### A. Material Receipt

- \* Inspect incoming equipment for damage, conformity, & documents.
- \* Confirm serial numbers, certifications, & factory test records.

### B. In-Process Inspections

- \* Perform inspections at hold points (civil, mechanical, electrical).
- \* Verify workmanship, measurements, & code compliance.
- \* Document findings with photos and checklists.

### C. Testing & Commissioning

- \* Conduct function testing, performance verification, & safety checks.
- \* Ensure all systems meet design criteria before energization.
- \* Record results for traceability & warranty compliance.

### D. Corrective Actions

- \* Issue non-conformance reports (NCRs) when applicable.
- \* Track corrective actions to closure through a documented process.
- \* Prevent reoccurrence through root cause analysis.

## DOCUMENTATION & TRACEABILITY

- \* Maintain daily quality reports, test records, redlines, & inspection forms.
- \* Keep an organized digital log of quality documentation for turnover packages.
- \* Ensure project traceability from material receipt through final commissioning.

## CONTINUOUS IMPROVEMENT

- \* Hold regular Quality Assurance & Quality Control coordination meetings.
- \* Analyze trends in defects rework & implement process improvements.
- \* Capture "lessons learned" and apply them to future projects.

## OUTCOMES OF STRONG QA/QC

- \* Reduced rework & schedule delays.
- \* Improved safety performance.
- \* Higher equipment reliability & system performance.
- \* Clear compliance with codes, standards, & warranty requirements.
- \* Stronger owner trust.