



COOLING TOWER REPLACEMENT COMMISSIONING And Project Closeout Checklist

Equipment type: Cooling tower

Equipment designation: CT-1

Barcode designation: 1111111

Area served: Base building

Equipment location: Roof

SPECIFICATION REVIEW

- Confirm Division 1 mechanical requirements (O&M manuals, record drawings, etc., have been submitted).
- Confirm Division 15 mechanical requirements have been met.
- Confirm Division 16 electrical requirements have been met.
- Confirm Division 17 building automation requirements have been met.

DRAWING REVIEW

- Confirm equipment complies with shop drawing submittal.
- Confirm equipment and distribution complies with standard details.
- Review trade contractor's punchlist.
- Review contractor startup sheets.
- Review building automation points list checkout.
- Complete exterior site inspection punchlist.
- Review water balancing report data-to-actual performance (pressure gauge readings, flow meter readings, etc.)
- Review air balancing and temperature operating data (cfm/fan, discharge temperature/fan, and multipoint temperature readings).

BUILDING SYSTEM DEMONSTRATION

- Commissioning engineer facilitates FPTs.
- Spot-check system training during the FPTs.
- Spot-check O&M manuals during the FPTs.
- Maintain corrective action log and necessary retesting.
- Document noise levels per local code.
- Complete final commissioning report.

LEED® CERTIFICATION COMPLIANCE

- Complete recommissioning manual.
- Confirm LEED® energy optimization software and associated system simulation is programmed and is trending.
- Confirm LEED measuring and verification plan is programmed and trending.
- Confirm 10-month warranty meeting to revisit site and discuss "lessons learned, etc."

DOCUMENTATION TO BUILDING MANAGER

- Transfer final commissioning report including:
 - DID
 - PFPT checklists
 - Seasonal FPT demonstration
 - "Scrubbed" FPT narratives for future use
 - Meeting minutes
 - Project photograph log and associated photographs

- Transfer CAD-layered record drawings.
- Transfer CAD-layered facility management drawings.
- Transfer barcoded equipment database.
- Submit equipment submittal and O&M manual website-specific equipment address.
- Confirm equipment and terminals are barcoded.
- Post electrical one-line diagram (laminated) in equipment room.
- Post CT-1 flow diagrams (laminated) in equipment room.
- Transfer barcode scanner.
- Transfer CMMS software with/or equipment database.
- Transfer planned maintenance workorders.
- Transfer service contract.
- Transfer recommissioning manual.
- Transfer ownership of laptop or tablet computer with Internet access to CT-1 control panel CP-1 for off-site monitoring.
- Transfer recommended organization chart.
- Transfer recommended operating budget. **ES**

CENTRAL EQUIPMENT

TERMINAL EQUIPMENT AND SPACE

PROJECT CLOSEOUT



If you have any comments, suggestions, or questions regarding this designer checklist, contact Amanda McKew at amckew@rdkengineers.com.

This column is meant to provide some basic guidelines for good design. Always consult all necessary codes and resources relevant to each particular project.

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