

COMMERCIAL AND PUBLIC BUILDINGS *Commissioning and Project Closeout Checklist*

Equipment type: Rooftop units
Equipment designation: RTU-1
Barcode designation: 11111
Area served: One-story office space
Equipment location: Rooftop

BASIS OF DESIGN

- Review and confirm design intent has been met.
- Review and confirm control set points are within range of design criteria.
- Review BAS computer trending to date.

SPECIFICATION REVIEW

- Confirm Division 1 mechanical and electrical 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 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).

BUILDING SYSTEM DEMONSTRATION

- Commissioning engineer facilitates FPTs.
- Spot-check system training during FPTs.
- Spot-check O&M manuals during FPTs.
- Confirm PM workorders are complete and ready to begin at time of certificate of occupancy.
- Confirm BAS computer predictive maintenance monitoring and workorder initiation is complete and ready to begin at time of certificate of occupancy.
- Maintain corrective action log and perform necessary re-testing.
- Set and observe that deferred seasonal FPT has been completed.
- Complete final commissioning report.

LEED® CERTIFICATION COMPLIANCE

- Complete recommissioning manual.
- Confirm system training completion and facility staff signoff on training class attendance.
- Confirm LEED® energy optimization software and associated system simulation is programmed and 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:
 - BofD/DID
 - Commissioning plan/specification (for future building program use)
 - PFPT checklists
 - Observation checklists
 - Field reports
 - Continuous commissioning BAS computer process is in place (if applicable)
 - Scrubbed FPT narratives for future use
 - Meeting minutes
 - Project photograph log and associated photographs
 - Lessons-learned meeting minutes
 - Transfer CAD-layered record drawings
- Transfer CAD-layered facility management drawings.
- Transfer barcoded equipment, panel, and valve database.
- Confirm equipment, panels, and valves are barcoded.
- Post system flow diagram and TAB flow diagram.
- Transfer barcode scanner.
- Transfer Commissioning 1-2-3 electronic files.
- Transfer CMMS with/or equipment database.
- Transfer planned maintenance workorders.
- Transfer service contract.
- Transfer recommissioning manual.
- Transfer ownership of laptop or tablet computer with Internet access and BAS computer for off-site monitoring.
- Transfer recommended operating budget. **ES**

- Central Equipment**
- Terminal Equipment & Space**
- Project Closeout**

McKew is an HVAC commissioning engineer in the Building Solutions Group at RDK Engineers. 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.

