

COMMISSIONING AND PROJECT CLOSEOUT FOR MAIN DISTRIBUTION FRAME (MDF) ROOM PACKAGED HVAC UNIT/SYSTEM

Equipment type: CACU-1
Equipment designation: Packaged HVAC unit
Barcode designation: 111111
Area served: MDF room
Equipment location: In occupied space

BASIS OF DESIGN

- Review and confirm design intent has been met.
- Review and confirm control setpoints 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 the FPTs.
- Spot-check O&M manuals during the 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 necessary retesting.
- Set and observe that deferred seasonal FPT has been completed.
- Complete final commissioning report.

LEED® CERTIFICATION COMPLIANCE

- Complete recommissioning manual.
- Confirm system training has been completed and facility staff signoff on training class attendance.
- Confirm LEED® energy optimization software and associated system simulation is programmed and is trending.
- Confirm LEED measuring and verification plan is programmed

and is trending.

- Confirm 10-month warranty meeting to revisit site and discuss lessons learned, etc.

DOCUMENTATION TO BUILDING MANAGER

- Transfer final commissioning report, including:
 - Basis of design/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 bar-coded equipment, panel, and valve database.
- Confirm equipment, panels, and valves are bar-coded.
- Post system flow diagram and TAB flow diagram.
- Transfer bar-code 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**

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.

