



## EQUIPMENT STARTUP CHECKLIST — AHU

**Equipment type:** AHU  
**Equipment designation:** AHU-1  
**Bar code designation:** ###

### ELECTRICAL INSPECTION

	YES	NO
• Electrical completed and disconnect installed per code compliance.	<input type="checkbox"/>	<input type="checkbox"/>
• Starter and wire sized per contract documents.	<input type="checkbox"/>	<input type="checkbox"/>
• Motor "bumped" to verify rotation.	<input type="checkbox"/>	<input type="checkbox"/>
• Terminations and panel circuit labeled.	<input type="checkbox"/>	<input type="checkbox"/>
• Voltage and motor amps (per phase) documented.	<input type="checkbox"/>	<input type="checkbox"/>

### ELECTRICAL INSTALLATION (PER CONTRACT DRAWINGS AND SPECIFICATION)

	YES	NO
• Ductwork complete.	<input type="checkbox"/>	<input type="checkbox"/>
• Piping complete.	<input type="checkbox"/>	<input type="checkbox"/>
• Vibration isolation complete.	<input type="checkbox"/>	<input type="checkbox"/>
• Seismic restraints complete.	<input type="checkbox"/>	<input type="checkbox"/>
• Manufacturers' O&M available.	<input type="checkbox"/>	<input type="checkbox"/>
• Manufacturers' startup sheets attached with this checklist.	<input type="checkbox"/>	<input type="checkbox"/>
• Warranty certificate available.	<input type="checkbox"/>	<input type="checkbox"/>

### DISTRIBUTION (TO AND FROM EQUIPMENT)

	YES	NO
• Ductwork pressure tested per contract documents.	<input type="checkbox"/>	<input type="checkbox"/>
• Piping pressure tested per contract documents.	<input type="checkbox"/>	<input type="checkbox"/>
• TAB report (and field notes) attached with this checklist.	<input type="checkbox"/>	<input type="checkbox"/>
• Identification per contract documents.	<input type="checkbox"/>	<input type="checkbox"/>

### AUTOMATIC CONTROLS

	YES	NO
• Temperature controls complete.	<input type="checkbox"/>	<input type="checkbox"/>
• Control points confirmed.	<input type="checkbox"/>	<input type="checkbox"/>
• Electrical system interlocks complete.	<input type="checkbox"/>	<input type="checkbox"/>
• Fire alarm interface complete.	<input type="checkbox"/>	<input type="checkbox"/>
• Security interface complete.	<input type="checkbox"/>	<input type="checkbox"/>

### TRICKS OF THE TRADE

- Attach equipment schedule and design criteria to checklist.
- Attach sequence of operation to checklist.
- Attach associated contract detail drawing to checklist.
- Complete missing equipment data sheet for CMMS when providing initial PM workorder requirement.
- Have a system flow diagram when starting up the equipment with estimated flows, pressure, and pressure drops noted on diagram.
- Refer to equipment manufacturers' literature for additional data and requirements.
- This checklist should be completed prior to system commissioning process.

### REFERENCE

- 2004 ASHRAE Handbook — Systems & Equipment.
- 2003 ASHRAE Handbook — Applications, Chapter 3 (restaurants/caferterias).

### DESIGN REVIEW / TRICKS OF THE TRADE

- Confirm there is safe access to the equipment.
- Confirm there will not be short-circuiting of exhaust air into air intakes and/or other building openings.
- Spot-check cooling capacity by dividing square feet by tons-cooling for sq ft/ton.
- Spot-check total fan static (and velocity pressure) for excessive/inadequate pressure drop.
- Attach equipment schedule and design criteria to checklist.
- Attach sequence of operation to checklist.
- Attach associated contract detail drawing to checklist.

### NOTE

- Refer to equipment manufacturers' literature for additional data and requirements. **ES**



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

