

EQUIPMENT STARTUP CHECKLIST

For Places of Assembly: The School Gymnasium

Equipment type: Two AHUs
Equipment designation: AHU-1, AHU-2
Barcode designation: 111111
Area served: School gymnasium
Equipment location: Rooftop

ELECTRICAL INSPECTION

- | | [Y] | [N] |
|---|-----------------------|-----------------------|
| • Confirm that electrical connections are complete. | <input type="radio"/> | <input type="radio"/> |
| • Disconnect installed per code compliance. | <input type="radio"/> | <input type="radio"/> |
| • Starter and wire sizing per contract documents. | <input type="radio"/> | <input type="radio"/> |
| • Motor bumped to verify rotation. | <input type="radio"/> | <input type="radio"/> |
| • Terminations and panel circuit labeled. | <input type="radio"/> | <input type="radio"/> |
| • Voltage and motor amps (per phase) documented. | <input type="radio"/> | <input type="radio"/> |
| • Electric reheat connected (if applicable). | <input type="radio"/> | <input type="radio"/> |
| • Electric humidifier connected (if applicable). | <input type="radio"/> | <input type="radio"/> |

EQUIPMENT INSTALLATION (PER CONTRACT DRAWINGS AND SPECIFICATION)

- | | [Y] | [N] |
|---|-----------------------|-----------------------|
| • Piping installation complete at unit (CHW, CW or DX). | <input type="radio"/> | <input type="radio"/> |
| • Vibration isolation complete (if applicable). | <input type="radio"/> | <input type="radio"/> |
| • Seismic restraints complete (if applicable). | <input type="radio"/> | <input type="radio"/> |
| • Interior of unit is clean of any debris. | <input type="radio"/> | <input type="radio"/> |
| • Filters are clean with no restricted airflow. | <input type="radio"/> | <input type="radio"/> |
| • Manufacturer's O&M info available. | <input type="radio"/> | <input type="radio"/> |
| • Manufacturer's startup sheets attached with this checklist. | <input type="radio"/> | <input type="radio"/> |
| • Warranty certificate available. | <input type="radio"/> | <input type="radio"/> |

DISTRIBUTION (TO AND FROM EQUIPMENT)

- | | [Y] | [N] |
|--|-----------------------|-----------------------|
| • Piping pressure tested per contract documents (no leaks). | <input type="radio"/> | <input type="radio"/> |
| • Humidification installation complete (if applicable). | <input type="radio"/> | <input type="radio"/> |
| • Insulation completed. | <input type="radio"/> | <input type="radio"/> |
| • Non-toxic glycol solution at correct percentage (if applicable). | <input type="radio"/> | <input type="radio"/> |
| • Installation per contract documents (specification and details). | <input type="radio"/> | <input type="radio"/> |
| • TAB report and field notes attached with this checklist. | <input type="radio"/> | <input type="radio"/> |
| • Identification per contract documents. | <input type="radio"/> | <input type="radio"/> |

AUTOMATIC CONTROLS

- | | [Y] | [N] |
|---|-----------------------|-----------------------|
| • Control points confirmed. | <input type="radio"/> | <input type="radio"/> |
| • Alarm types determined and enabled. | <input type="radio"/> | <input type="radio"/> |
| • Alarm limits programmed. | <input type="radio"/> | <input type="radio"/> |
| • Electrical system interlocks complete. | <input type="radio"/> | <input type="radio"/> |
| • Unit furnished controls interfaced with owner's BAS computer. | <input type="radio"/> | <input type="radio"/> |

DESIGN REVIEW AND TRICKS-OF-THE TRADE

- Create an airflow diagram indicating CFM, air changes, and space pressure.
- Confirm there is safe access to the equipment.

- Confirm there is the manufacturers' recommended clearance around equipment.
- Consider if routine maintenance can be achieved without shutting unit down.
- Attach equipment schedule and design criteria to checklist
- Attach sequence of operation to checklist.
- Attach associated contract detail drawing to checklist.

REFERENCE

- *2008 ASHRAE Handbook –Systems & Equipment*, Chapter 1, "HVAC System Analysis and Selection," and Chapter 2, "Decentralized Cooling & Heating."
- *2007 ASHRAE Handbook –HVAC Applications*, Chapter 4, "Places of Assembly"

NOTE

- Refer to equipment manufacturers' literature for additional data and requirements.
- Refer to building owner standards and guidelines for additional criteria. **ES**



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



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