

DESIGN-BUILD SESSION 1 CHECKLIST

Condo/Apartment Complex Units (Residences)

Job number: 2007#
Equipment type: AHU
Equipment designation: AHU-1
Area served: Apartment
Barcode designation: 111111
Equipment location: Equipment room

HVAC CONSIDERATIONS [Y] [N]

- Within existing building: [Y] [N]
 - Can the floor carry the weight?
 - Can new equipment be rigged in?
 - Does the equipment room enclosure require upgrade to meet current building code requirements?
 - Specify reused ductwork to be cleaned, pressure tests, and/or reinforced for new duct pressure?
- New construction: [Y] [N]
 - Is the equipment room adequate for servicing?
 - Is there combustion air or refrigerant vent code compliance?
 - Is the equipment unit located correctly (access, ambient noise, and vibration per manufacturer)?
 - Is there an owner's project requirement document (per LEED®)?
 - Is there a basis of design document (per LEED)?
 - Has system flow diagram(s) been completed for ATC/FPT, TAB, and electrical data?
 - Spot-check for cfm/sq ft (HVAC, Btuh/sq ft (heating), and/or sq ft/ton (cooling)
 - Are isolation valves in place, or will a special shutdown and drain down be required to add them?
 - What equipment to have extended warranties?
 - Will there be a service contract submitted for the new tower installation?

PLUMBING CONSIDERATIONS [Y] [N]

- Are drains coordinated with HVAC equipment?
- Are city water makeup and associated backflow preventor(s) coordinated?
- Has water filtration been considered (e.g., humidifier)?

ELECTRICAL CONSIDERATIONS [Y] [N]

- Electric data provided, including emergency power requirements?
- Have smoke detection HVAC requirements been coordinated?
- Have water leak detection HVAC requirements been coordinated?

- Is harmonic testing required and/or specified?
- Is there lockout-tag out procedures in place and localized disconnect(s)?

SUSTAINABILITY CONSIDERATIONS [Y] [N]

- Are sustainable features specified as "basis of design" and not as "alternate(s)"?
- Will "enhanced commissioning" credit be pursued?
- Will air and water balancing be third-party?
- Will "measurement and verification: credit be pursued and who will do this in the warranty phase?
- Will the building system energy software simulation be used to benchmark performance?

FACILITY MANAGEMENT CONSIDERATIONS [Y] [N]

- Has the contract specification been coordinated with the facility management software?
- Is there an energy budget (Btuh/sq ft/yr) in place?
- Will facility staff assigned to the commissioning FPT system demonstration?
- Will record drawings be submitted electronically along with one paper copy?
- Are all equipment O&M websites documented?

GENERAL CONSIDERATIONS [Y] [N]

- Are there any permits required?
- Are the safety guidelines and emergency action plan documented?
- Has the monthly payment/cash flow been documented?
- Have daily cleanup costs been included in fee?

NOTES:

• Refer to Chapter 1, "Residences," in the *2007 ASHRAE Handbook – Applications*. **ES**

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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