BASIS OF DESIGN – BUILDING PROGRAM TO BASIS OF DESIGN FOR A HIGH-PERFORMANCE HOSPITAL PATIENT ROOM RETROFIT

Date: November 2015 Project Name: Building Program To Basis Of Design For A High-Performance Hospital Patient Room Retrofit Project #: 2015-11
Prepared By: Reader Revision date:_____

BUILDING

❑ New Construction ❑ Renovation ❑ Addition Sq. Ft.:_____ No. of floors below grade:_____ No. of floors at and above grade: _____

UTILITIES

Electrical: ❑ New ❑ Upgrade ❑ Existing **Gas:** ❑ New ❑ Upgrade ❑ Existing **Steam:** ❑ New ❑ Upgrade ❑ Existing **Chilled Water:** ❑ New ❑ Upgrade ❑ Existing

Hot Water: ❑ New ❑ Upgrade ❑ Existing

Services from Utility of: ❑ Electric ❑ Gas ❑ District Energy ❑ Existing **Campus Power Plant:** ❑ Electric ❑ Gas ❑ Steam ❑ CHWS ❑ CWS ❑ Hot Water ❑ None

UTILITY DESIGN PARAMETERS

Electrical: ❑ 120/1/60 ❑ 208/3/60 ❑ 277/3/60 ❑ 480/3/60 ❑ ___/3/60

Emergency Power: ❑ New ❑ Diesel oil ❑ Gas ❑ Existing ❑ None

Steam Pressure: ❑ Low @ __psig ❑ Medium @ __psig ❑ High @ __psig ❑ High @ __psig

Chilled Water Temperature: ❑ CHWS @ 44˚F & CHWR @ 58˚F ❑ None

Condenser Water Temperature: ❑ CWS @ 85˚F & CWR @ 95˚F ❑ None

Hot Water Temperature: ❑ HWS @ 160˚F & HWR @ 120˚F when 17˚F OAT and 90˚F HWR 70˚F when OAT is 60˚F ❑ Off above 60˚F ❑ Fixed HWS @ 180˚F & HWR @ 150˚F ❑ None

ASHRAE APPLICATION HANDBOOK

ASHRAE 2015 Handbook: Chapter [ ] [ ] [ ] **ASHRAE 2012 Handbook:** Chapter [ ] [ ] Other Chapters

OWNER MECHANICAL DESIGN PARAMETERS

Equipment Location: ❑ On floor being served ❑ In central equipment room(s) ❑ _____ ❑ In penthouse ❑ On roof ❑ Away from building ❑ Above ceilings

Maintenance Outside Occupied Space: ❑ Yes serving primary HVAC equipment ❑ Yes serving room terminals ❑ No

Redundancy: ❑ For primary & secondary equipment ❑ N+1 ❑ N+N ❑ No

Equipment/System Expansion: ❑ Increase equipment size by 15% ❑ No

Indoor Air Quality at: MERV rating of [ ] for pre-filters MERV rating of [ ] for final filter, MERV rating of [ ] for final filter and MERV [ ] for fan-powered unit filters

Acoustic & Vibration Criteria: ❑ Design parameters by acoustic consultant ❑ None

Specialty Room(s): ❑ _____ *(Reader to list room)* ❑ None

Occupancy Schedule: ❑ 24-7-365 ❑ Occupied/Unoccupied with manual over-ride

DESIGN CRITERIA

Outdoor Dry Bulb & Wet Bulb:__˚F Heating season ____˚F/__˚F Cooling season

Patient Rooms: ❑ Occupied 24-7 period ❑ Occupied-unoccupied period ❑ Warm-up & cool down ❑ _____

Set Point: __˚F and __% RH Heating Season & __˚F <__%RH Cooling Season

Mechanical & Electrical Space and Back of the House Area: ❑ Occupied 24-7 period ❑ Occupied-unoccupied period ❑ Warm-up & cool down ❑ NA

Set Point:__˚F Heating season & __˚F< 65% RH Cooling season ❑ Not applicable

ENERGY & ENVIRONMENT CRITERIA

LEED Certification: ❑ Yes ❑ No ❑ Other certification *(List the program)*

Infection Control: ❑ In-House IC manager ❑ 3rd party IC commissioning consultant ❑ Not applicable

Annual Operating Budget: ❑ With energy budget ❑ With organization structure ❑ Outsource operation & maintenance ❑ Building only ❑ NA

Refer To "The Facility Files" For Additional Operation & Maintenance Design Criteria

SPECIAL CONDITIONS & REQUIREMENTS

1. _____
2. _____
3. _____

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