
Current Facility Requirements (CFR)

Facility Info

Facility Name: _____ Facility # _____ Year Constructed (or major renovation): _____ Date of Cx or last RCx: _____

Total Square Footage (Conditioned/Unconditioned): _____ / _____ Primary Function: _____

Location:

Facility Site (insert site map with highlighted site boundaries here)

Total Facility Population: _____ Regular Occupied Hours: _____ Holiday/Special Hours: _____

Utility Rates, Electrical Usage: _____ Demand: _____ Natural Gas: _____ Water: _____

Facility Mission Statement: _____

Space Needs

Summary of Space Usage (or changes): _____

Space Type 1: _____ No of Reg Occupants: _____ Size (SF or %): _____ Hours: _____ Special Hours/Concerns: _____

Space Type 2: _____ No of Reg Occupants: _____ Size (SF or %): _____ Hours: _____ Special Hours/Concerns: _____

Space Type 3: _____ No of Reg Occupants: _____ Size (SF or %): _____ Hours: _____ Special Hours/Concerns: _____

Space Type 4: _____ No of Reg Occupants: _____ Size (SF or %): _____ Hours: _____ Special Hours/Concerns: _____

Space Type 5: _____ No of Reg Occupants: _____ Size (SF or %): _____ Hours: _____ Special Hours/Concerns: _____

Space Type 6: _____ No of Reg Occupants: _____ Size (SF or %): _____ Hours: _____ Special Hours/Concerns: _____

Space Type 7: _____ No of Reg Occupants: _____ Size (SF or %): _____ Hours: _____ Special Hours/Concerns: _____

Space Type 8: _____ No of Reg Occupants: _____ Size (SF or %): _____ Hours: _____ Special Hours/Concerns: _____

Space Type 9: _____ No of Reg Occupants: _____ Size (SF or %): _____ Hours: _____ Special Hours/Concerns: _____

Space Type 10: _____ No of Reg Occupants: _____ Size (SF or %): _____ Hours: _____ Special Hours/Concerns: _____

Installed Systems:

1. Envelope:

Roof Type: _____ Roof Material: _____ Roof Slope: _____ R-Value: _____
Wall Type: _____ Air Tightness Requirements: _____ R-Value: _____
Window Panes: _____ Frame Materials: _____ SGC Value: _____ Overall U-Value: _____
Primary Entrance Location: _____ Total Entrance Quantity: _____ Vestibules Required? (Y/N) _____

2. Mechanical:

Ventilation Strategy: _____ Terminal Equipment: _____
Part-Load Requirements: _____ Redundancy Requirement: _____ Efficiency Requirement: _____
Special Sequences Requested: _____

Heating System Plant Type: _____ Terminal Equipment: _____
Part-Load Requirements: _____ Redundancy Requirement: _____ Efficiency Requirement: _____
Special Sequences Requested: _____

Cooling System Plant Type: _____ Terminal Equipment: _____
Part-Load Requirements: _____ Redundancy Requirement: _____ Efficiency Requirement: _____
Special Sequences Requested: _____

3. Domestic Hot Water:

Solar Thermal Requirements: _____
Redundancy or Auxiliary Equipment: _____
Delivered Temperature: _____ Flow Rate Required: _____ Storage Needs: _____ Maximum Thermal Losses: _____
Special Sequences Requested: _____

4. Plumbing:

Fixture Flow Ratings: _____ (Faucets) _____ (Showers) _____ (Toilets) _____ (Urinals) _____ (Kitchen Sinks) _____ (Janitor Sinks)
Dual Supply Piping Needed? (Y/N): _____ Source of Non-Potable Supply: _____ Storage/Connection Requirements: _____
Gray vs Black Waste Piping Needed? (Y/N): _____ Gray Water Application: _____ Treatment/Recovery Goals: _____

5. Lighting:

Acceptable Interior Lighting Technology Types: _____
Interior Lighting Power Density Ranges per Space Type: _____
Interior Lighting Control Strategies per Space Type: _____

Acceptable Exterior Lighting Technology Types: _____
Exterior Lighting Power Density Ranges per Space Type: _____
Exterior Lighting Control Strategies per Space Type: _____

6. Appliances:

Appliances/Quantities Needed: _____
Appliances Not Allowed: _____
Special Appliance Energy Controls: _____

7. Generation:

PV Status (circle all that apply): None Rooftop Ground-Mount Combo Connections Needed for Future PV? (Y/N): _____
PV Size/Prod Est: ____ (kW)/ ____ (kWh/yr) Bldg Dmd/Usage Est: ____ (kW)/ ____ (kWh/yr) PV Efficiency: _____ Inverter Efficiency: _____
PV Orientation: _____ PV Shading Favor: _____ DC Power Uses: _____ Inverter Efficiency: _____
Square Feet Available for PV: _____ Square Feet Needed for PV (including BOS): _____ Irradiance Data Source: _____
Cogeneration Production Source (circle one): Fuel Cell Microturbine Biodiesel Engine Supply Temp/Flow: ____ (F)/ ____ (GPM)
PV Size/Prod Est: ____ (kW)/ ____ (kWh/yr), ____ (th/yr) Bldg Dmd/Usage Est: ____ (kW)/ ____ (kWh/yr), ____ (th/yr) Efficiency: _____
Spark Spread: _____ Permit Type Needed: _____ Incentive Type: _____ Incentive Amount: _____

8. UMCS:

Building Automation Type Required (circle one): Electric Only LonWorks BACnet Estimated DDC Points Needed: _____
Integration Needed?(Y/N): _____ Building Switch Needed?(Y/N): _____ Building POC Device (Make/Model): _____
Specific UMCS Requirements: _____

Energy Goals

1. Energy Goals: _____ Payback Targets _____
Target EUI (Site): _____ Existing EUI (Site): _____ Design EUI (Site) Site Source Factors: Elec _____ NG _____
Existing Energy Data: Elec (Interval/Consecutive Months) ____/____ NG (Interval/Consecutive Months) ____/____

2. Leadership in Energy and Environmental Design (LEED) Rating System:
LEED Rating Version (circle one): version 3 version 4 None
LEED Target Level (circle one): Certified Silver Gold Platinum

3. Target Operational Strategies (Yes or No):

_____ Trimming hours of operation for HVAC, lighting, and electrical systems with tighter plant or zone scheduling, start-up or shut-down optimization, and holiday or training day schedule exemptions

_____ Adjusting zone lighting, temperature, humidity, or ventilation levels to achieve compliance with the Current Facility Requirements or applicable ASHRAE and IESNA standards from the References section, whichever is more stringent.

_____ On-demand zone HVAC strategies in partially occupied spaces to include demand-controlled ventilation, outside air resets, and standby zone temperature set points based on known schedule, CO2, motion, or thermostat override proxies as allowed by code

_____ On-demand plant HVAC strategies for low or no load conditions to include time-delayed demand-based hot or chilled water pump enables, set point deviation-based boiler or chiller enables with anti-cycling, and time or temp-based DHW recirculation pump enables as allowed by equipment manufacturer

_____ Automatic demand-based reset of plant set points: duct static, coil discharge temperature, mixed air temperature, and hydronic loop and supply temperature, storage tank temperature, and economizer outside air flow

_____ Mitigation of over-sized HVAC equipment through restaging heating or cooling equipment, thermal flywheel cycles, pump impeller trims or VFDs, or rebalancing/resheaving of fan systems

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_____ Load reduction in hydronic systems through removal of unnecessary pressure drops and decommission of unneeded, parasitic, or partially used electrical equipment that can be replaced with more efficient, on-demand, or better sized units

_____ Conversion of constant volume air-side or hydronic systems to variable flow type through damper, valve, VFD, and/or BAS programming changes or improvement to existing variable flow sequences such as return fan tracking, relief fan space pressure control, VFD PI tuning, reprogramming of VFD output for CFM corrections, and staging of related interdependent resets

_____ Eliminating or minimizing instances of simultaneous heating and cooling in air handlers, within zones, and for adjacent zones

_____ BAS repairs that may address communication failures, interoperability issues, outdated software problems, logic errors or mistakes, sensor faults, output hunting, PID loop tuning, or point-to-point checks needed

_____ Maximizing use of efficient equipment or stages including optimization of condensing mode in new or existing boiler systems, reduction of the need for chiller hot gas bypass, and reliance on standalone HVAC or lighting in critical zone that would otherwise increase centralized system runtimes or set points

_____ Economizer improvements to address stuck or leaky dampers, inappropriate changeover or high-limit set points, stratified air, poor outside or mixed air sensor location, excess minimum or total outside air flow, control type changes (e.g., fixed dry, differential dry, or wet bulb control), different mixed vs preheat discharge vs supply air temperature set point, mixed air temperature and economizer flow reset potential, removal of unnecessary preheat coils, damper hunting, unoccupied or warm-mode damper closures

_____ Maintenance program improvements addressing issues such as air filter selection and replacement optimization, hydronic chemical treatment procedures, cooling tower and boiler blowdown reductions, equipment cleaning and tuning schedules, how system malfunctions or occupant complaints are handled, misuse of hand-off-auto switches or BAS overrides, or gaps in training required for proper system operation and maintenance

_____ Human behavior issues such as inadequate signage or instruction, occupant requirements for control of energy systems, awareness of thermostat features, procedures for end-of-day system shutdowns (HVAC, lights, equipment), conflicts with night cleaning crews, procedures for reporting maintenance issues or occupant complaints, and incentivizing energy conservation

_____ Other: _____

Comfort Goals:

1. Define comfort (as an occupant): _____

2. Target Criteria: Cooling DB/RH: _____/_____ Heating DB: _____/_____
3. Identify Critical Spaces: _____
4. _____
5. List On-Going Comfort Issues: _____
6. Date of Most Recent Thermal Comfort Survey: _____ Summarize Results: _____

7. Energy-Related Actions Required by Occupants _____

Maintenance Goals:

1. Define comfort (as maintenance lead): _____

2. List Maintenance Schedules: Average Work Orders per Year: _____

Name	Replacements	Cleaning	Tuning
Equipment 1: _____	_____	_____	_____
Equipment 2: _____	_____	_____	_____
Equipment 3: _____	_____	_____	_____
Equipment 4: _____	_____	_____	_____
Equipment 5: _____	_____	_____	_____
Equipment 6: _____	_____	_____	_____
Equipment 7: _____	_____	_____	_____
Equipment 8: _____	_____	_____	_____
Equipment 9: _____	_____	_____	_____
Equipment 10: _____	_____	_____	_____

3. List On-Going Maintenance Issues: _____

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Approved:

_____	_____	_____
Owner's Representative	Organization, Title	Date

_____	_____	_____
Design Agent's Representative	Organization, Title	Date