



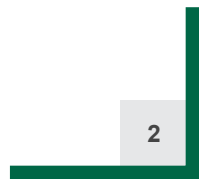
## CURRENT FACILITIES REQUIREMENTS

*This document is modified from an ASHRAE standard Owner's Project Requirements document with the Current Facilities Requirements Appendix. It is intended to illustrate key elements of a CFR and is in no way a complete document. It should be customized to each individual facility and updated on an annual basis. If unique space types within a facility have differing facility requirements from others, sections may need to be repeated to address individual space type requirements.*



# TABLE OF CONTENTS

- 1. LEED O+M Requirements**
- 2. Building Occupancy Schedules**
- 3. Equipment Run Time Schedules**
- 4. HVAC Equipment Setpoints**
- 5. Procedures**
  - Facility Operating Procedures
  - Operational Record-Keeping Procedures
- 6. Requirements**
  - Minimum Outdoor Air Requirements
  - Seasonal Operating Changes
  - Lighting Level Setpoints
  - User / Occupant Requirements
  - Owner-Directed Requirements
  - Facility Specific Requirements
  - Owner Training Requirements
  - Sustainability Requirements
  - Equipment & System Maintenance Requirements
  - Regulatory Requirements
  - Ongoing Commissioning (OCx) Requirements
  - Financial Requirements & Investment Criteria





# 1. LEED O+M REQUIREMENTS

If pursuing LEED O+M Certification, the CFR document must include the following sections covered in additional portions of this document. This section is provided for the purpose of ensuring a CFR used for LEED O+M is complete.

- a current sequence of operations for the building;
- the project occupancy schedule;
- equipment run time schedules;
- setpoints for all HVAC equipment;
- setpoints for lighting levels throughout the project;
- minimum outside air requirements;
- any changes in schedules or setpoints for different seasons, days of the week, and times of day;
- a systems narrative describing the mechanical and electrical systems and equipment in the project; and
- a preventive maintenance plan for equipment described in the systems narrative.

# 2. OCCUPANCY SCHEDULES

## Preliminary Building Use

Average Hours / Week \_\_\_\_\_ Average Weeks / Year \_\_\_\_\_

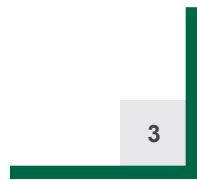
Average Number of Occupants During Normal Occupied Period \_\_\_\_\_

After Hours Cleaning?    YES    NO

## Overall Building Schedule

Schedule during months of:

		MON	TUE	WED	THU	FRI	SAT	SUN	HOL
JAN	JUL								
FEB	AUG								
MAR	SEP								
APR	OCT								
MAY	NOV								
JUN	DEC								
<b>Hours Open:</b>									
<b>Hours Closed:</b>									
<b>Peak # of Occupants:</b>									
<b>Avg. # of Occupants when Open:</b>									





### Overall Building Schedule, Cont.

Schedule during months of:

		MON	TUE	WED	THU	FRI	SAT	SUN	HOL
JAN	JUL								
FEB	AUG								
MAR	SEP								
APR	OCT								
MAY	NOV								
JUN	DEC								

Hours Open:

Hours Closed:

Peak # of Occupants:

Avg. # of Occupants when Open:

## 3. EQUIPMENT RUN TIME SCHEDULES

### (OPTIONAL) Detailed Usage Schedule

Space Type: \_\_\_\_\_

Schedule during months of:

		MON	TUE	WED	THU	FRI	SAT	SUN	HOL
JAN	JUL								
FEB	AUG								
MAR	SEP								
APR	OCT								
MAY	NOV								
JUN	DEC								

Hours Open:

Hours Closed:

Peak # of Occupants:

Avg. # of Occupants when Open:

Schedule during months of:

		MON	TUE	WED	THU	FRI	SAT	SUN	HOL
JAN	JUL								
FEB	AUG								
MAR	SEP								
APR	OCT								
MAY	NOV								
JUN	DEC								

Hours Open:

Hours Closed:

Peak # of Occupants:

Avg. # of Occupants when Open:





# 4. HVAC EQUIPMENT SETPOINTS

## Occupied Setpoints

	Cooling	Heating
Space:		
Building:		
Special Zone Setpoints:		
AHUDAT:		

## Unoccupied Setback

	Cooling	Heating
Space:		
Building:		
Special Zone Setpoints:		
AHUDAT:		

### Shutdown of:

AHUs by Time Schedule: \_\_\_\_\_

Exhaust Fans by Time Schedule: \_\_\_\_\_

### Chillers:

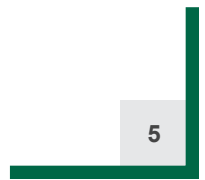
By Time Schedule: \_\_\_\_\_

By Outside Air Temperature: \_\_\_\_\_

### Boilers:

By Time Schedule: \_\_\_\_\_

By Outside Air Temperature: \_\_\_\_\_





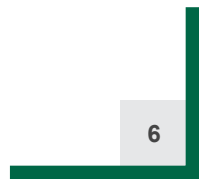
## 5. PROCEDURES

### **Facility Operating Procedures**

For all normal, abnormal, and emergency modes of operation.

### **Operational Record-Keeping Procedures**

A list of recommended operational record-keeping procedures at the facility level, including sample forms, trend logs, or others, and a rationale for each.





## 6. REQUIREMENTS

### **Minimum Outdoor Air Requirements**

Identify requirements for Code and / or operational needs.

### **Seasonal Operating Changes**

Identify requirements for Code and / or operational needs.

### **Lighting Level Setpoints**

Identify requirements for Code and / or operational needs.





**User / Occupant Requirements**

Identify features or controllability necessary for the occupants of the space.

**Owner – Directed Requirements**

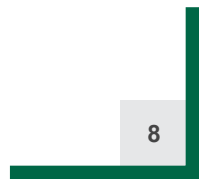
Identify other special considerations as directed by ownership.

**Facility Specific Requirements**

Identify special circumstances and / or operational needs impacting building systems.

**Owner Training Requirements**

Identify the skill / training levels required of facility staff.





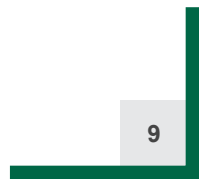


### **Sustainability Requirements**

Include specific performance goals and metrics as part of your Sustainability reporting goals.

### **Equipment & Systems Maintainability Requirements**

Include details of systems and operational requirements.



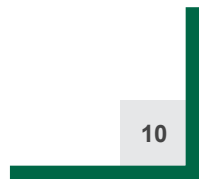


## Capabilities of Operators & Maintenance Team

Outsourced maintenance vs in-house.

### Documentation Requirements

- Updated BoD (Basis of Design)
- Updated record drawings for the facility
- Updated record specifications
- Updated system and assemblies material and equipment lists with nameplate info, dates of installation, and submittals
- Updated O&M manuals, including all control systems documentation
- Most recent and original testing and balancing reports
- Existing start up reports of systems
- Previous Cx reports
- Updated training materials
- Updated training logs
- Warranty logs
- Maintenance logs, including those from outside service contractors
- Copies of service contracts
- Inspection reports, studies, and analyses on the condition of any system and assemblies
- Existing energy-efficient operating strategies
- Recent energy audits (within last 4 years)
- Utility bills or energy use records for last 2 years
- Safety and health inspection reports
- Code inspection reports
- Architectural studies
- Roof inspection reports
- Recent changes documentation
- Recent additions documentation



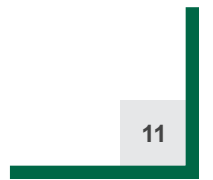


### **Regulatory Requirements**

Special operational or industry-specific guidelines you may need to follow that impact building operation.

### **Ongoing Commissioning (OCx) Requirements**

Facilitate a plan to keep the building systems properly functioning.





## **Benchmarks**

## **Financial Requirements & Investment Criteria**

