



# Greater Orlando IFMA Chapter CFM Roundtable

**Welcome to the September 2008**

**CFM Roundtable**

presented by

**The Greater Orlando IFMA  
Chapter,**

**AND**

**Our major sponsors**

**MilliCare by Cubix and**

**Workplace Resource of Central  
Florida**

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**Special thanks to our  
host TAMI BERRY of  
SPRINT**



# Greater Orlando IFMA Chapter CFM Roundtable

Today's facilitator:

**Patrick Baker, CFM**

Jones Lang LaSalle Americas

Chief Engineer, Critical Facilities, Charles Schwab Orlando

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to our Major  
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## **Greater Orlando IFMA Chapter CFM Roundtable**

**We will begin with a review of the Operations and Maintenance Section from the CFM Workbook and Self-Study Guide and Manual.**

**The materials presented here were compiled using the 2007 CFM Exam Review Course, Manual and Workbook/ Study Guide, which are available through the IFMA Bookstore on-line.**

### **Chapter 2: Operations and Maintenance**



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## Operations and Maintenance

**Competency 1. Oversee acquisition, installation, operation, maintenance and disposition of building systems.**

**Competency 2. Manage the maintenance of building structures and permanent interiors.**

**Competency 3. Oversee acquisition, installation, operation, maintenance and disposal of furniture and equipment.**

**Competency 4. Oversee acquisition, installation, operation, maintenance and disposition of grounds and exterior elements.**



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## Operations and Maintenance

### •Key elements/ Major Components

- Roads and Grounds Maintenance
  - Roadways/ Drives, Sidewalks and Parking Lots
  - Parking Structures
  - Landscaping
  - Site Utilities
- Building Interior Systems
  - Interior Finishes
  - Furniture, Fixtures and Equipment (FF&E)
- Building Structural and Exterior Systems
  - Structural Systems,
  - Roofs
  - Building Operating Systems
  - Building Exterior Systems
- Utility/ Central and Site Systems
  - Electrical Distribution/ Generating Systems
  - Central Plant Mechanical systems
  - Waste Water and Water Treatment Plants
  - Waste Management Systems



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## Facility Operations include:

- Landscaping and Grounds
- Building Cleaning
- Janitorial services
- Waste Management/ Hazardous Waste Mgmt., Recycling
- Relocation, Reconfiguration, Moves/ Adds/ Changes
- Physical Plant Operations
- Energy Management
- Life Safety
- Security
- Inventory Management
- Communications and Wire Management
- Business Continuity/ Disaster recovery
- Furniture Installation



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## Individual Learning Activity 1-6

Discuss three critical “first steps” needed to address the failure listed. Prioritize the list and tell with whom you would communicate and how/ when.

1. Emergency generator does not start in a power outage.
2. Emergency generator cannot be started during a scheduled exercise.
3. During heavy rains, the sewer system backs up into the basement during business hours.
4. A fire sprinkler head is accidentally knocked off in a storage room.
5. The main elevator is stuck between floors with several passengers in it.
6. An electrical transformer serving most overhead lighting fails leaving 2 floors without main lighting.



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### **Practice Questions**

**We'll discuss each question and then view the correct answer on the next slide.**

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## **Greater Orlando IFMA Chapter CFM Roundtable**

### **Study questions**

- 1. Of the following types of flooring, what type would you recommend for installation in a commercial kitchen?**
  - A. Commercial grade carpet that is easy to walk on**
  - B. Linoleum which has a luster & never needs to be waxed**
  - C. Non-slip quarry tile**
  - D. Concrete which is easy to sweep and damp mop**



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2. What are the things that you would look for to indicate whether the drop ceiling system is part of a fire-rated system? (choose 2)
- A. Heavy gauge steel grid
  - B. 2x2 ceiling tiles
  - C. Linear ceiling units
  - D. Lack of fire proofing above drop ceiling



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**3. In commercial construction, an interior wall constructed with metal studs is:**

- A. Always load bearing**
- B. Usually load bearing**
- C. Always non-load bearing**
- D. Usually non-load bearing**

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4. You are currently evaluating three different roofing systems for your facility.

Roof System-A costs \$100,000 and has a service life of 12 years.

Roof System-B costs \$125,000 and has a service life of 15 years

Roof System-C costs \$90,000 and has a service life of 10 years

Using Life Cycle cost techniques, which of the following would apply?  
(choose 3)

- A. System-C has a lower life cycle cost
- B. System-C has a higher life cycle cost
- C. Systems-A&B will have the same life cycle cost
- D. Systems-A&B have residual value



## Greater Orlando IFMA Chapter CFM Roundtable

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**Definition: Life-Cycle Costing: Process of determining (in present value terms) all costs incident to the planning, design, construction, operation and maintenance of a facility over time.**



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**5. Proposed renovation work in an existing building must meet code provisions applicable to:**

- A. Additions**
- B. New Construction**
- C. The original construction**
- D. Similar buildings**

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6. The steps of identifying, ordering, receiving, storing and expending materials are part of:

- A. Cost estimating
- B. Scheduling
- C. Work control
- D. Inventory control

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## Greater Orlando IFMA Chapter CFM Roundtable

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- B. Scheduling
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**7. Which of the following are considered best practices in delivery of HVAC services? (choose 3)**

- A. Performing preventive maintenance on all equipment**
- B. Providing a trained staff to operate the HVAC system**
- C. Establishing a complaint tracking program**
- D. Continuous monitoring of air quality**



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7. Which of the following are considered best practices in delivery of HVAC services? (choose 3)

- A. Performing preventive maintenance on all equipment
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- C. Establishing a complaint tracking program**
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**8. Building codes promote general occupant safety by:**

- A. Establishing the uses allowed within each defined area of the municipality**
- B. Providing nationally consistent standards**
- C. Regulating the design and construction of the building's components**
- D. Controlling the use, height and mass of a building**



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8. Building codes promote general occupant safety by:

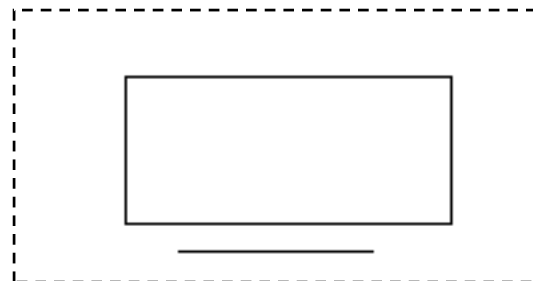
- A. Establishing the uses allowed within each defined area of the municipality
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## Greater Orlando IFMA Chapter CFM Roundtable

9. What would the symbol at the bottom of this page (inside the dashed lines) represent on an architectural furniture plan?

- A. Desk surface
- B. Lateral file cabinet
- C. Video monitor
- D. Lectern

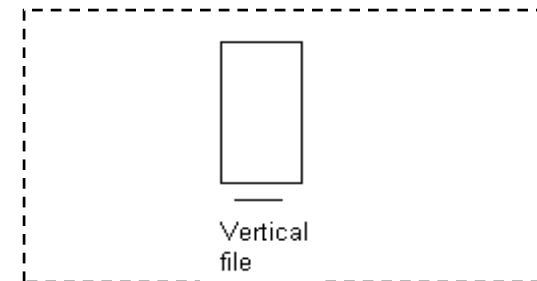
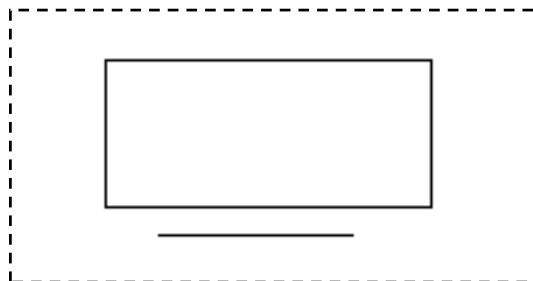




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## Greater Orlando IFMA Chapter CFM Roundtable

**Discussion/  
Questions?**



## Greater Orlando IFMA Chapter CFM Roundtable

**Thank you for participating in the September  
2008 CFM roundtable**

The next roundtable will be announced through  
the local IFMA Chapter office.

Please give us some feedback on what you are looking for in  
the CFM Roundtable format.



Thanks, again to  
our Major  
sponsors:





# Greater Orlando IFMA Chapter CFM Roundtable

## CFM Roundtable Feedback Form

1. Do you have a particular Competency you would like covered? \_\_\_\_\_

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2. Is there another format you would like considered? \_\_\_\_\_

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3. Can you suggest a tour activity that you would find helpful? \_\_\_\_\_

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4. Anything else you would like to offer? \_\_\_\_\_

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