

*The following text is limited to general procedures. For specific projects, design team needs to tailor and establish "project-specific" procedures and requirements. Design team may use this web page as a guideline after they independently verify its contents and the applicability of the issues listed.*

## **Fire and Life-Safety Group (FLS)**

# **FIRE ALARM AND DETECTION SYSTEMS**

## **REQUIREMENTS DURING SYSTEM INTERRUPTIONS**

(June 2004 Revision)

### **ANNOUNCEMENTS AND NOTIFICATIONS:**

Prior to initiating work, repair, or replacement procedures on any portion of the fire alarm and detection systems (FADS) which will cause the FADS to not be fully functional, the following announcements and notifications are to be made:

- Building Owner, Manager, and Proctor: Notify 3 working days prior to work.
- UCB Fire Systems Group of FM: Notify 3 working days prior to work.
- UCB Service Desk: Notify 24 hours prior to work and 1 hour prior to actual start of work.
- Boulder Fire Department: Notify 24 hours prior to work and 1 hour prior to actual start of work.
- Posted Announcement: Post temporary signs at each entrance to each building, each stairwell entrance, each elevator entrance, and inside each elevator cab. Signs are to be posted a minimum of one hour prior to occupant entry on the day during which the work will be performed. Signs are to be a minimum 8-1/2" x 11" dimension with block letter printing using black lettering on a light red or pink background. Provide with secure attachment and means of protecting from weather damage. Remove all Posted Announcements when work is complete. Sign is to state substantially:

**“WARNING! CHANGES AND RENOVATIONS TO THE FIRE ALARM SYSTEM IN THE [BUILDING NAME] WILL BE MADE TODAY [DAY OF THE WEEK, MONTH, DAY, YEAR]. DURING THE RENOVATIONS, PORTIONS OF THE FIRE ALARM SYSTEM WILL BE OUT OF SERVICE. IF A FIRE OCCURS, EXIT THE BUILDING IMMEDIATELY AND DIAL 911 FROM A SAFE LOCATION. DO NOT USE THE ELEVATORS DURING THE FIRE ALARM. THIS SIGN WILL BE REMOVED WHEN THE CHANGES AND RENOVATIONS ARE COMPLETE AND THE FIRE ALARM SYSTEM IS BACK IN SERVICE.”**

vii. Building Occupants: Immediately prior to initiating work, announce to all building occupants that the fire alarm system work is in progress. All personnel entering the building after these announcements are to be similarly advised of work in progress. When the fire alarm system work is no longer in progress and the FADS are back in service, an announcement to all building occupants is to be made that the fire alarm system work is no longer in progress and the FADS have been restored to normal operation.

### **PLANNED INTERRUPTIONS:**

Where feasible, interruptions of the fire alarm and detection systems in any buildings are to be limited to 4.0 hours when the building is occupied and 8.0 hours when the building is not occupied. The FADS may not remain interrupted at night unless fire-watcher(s) are present. One of the following three procedures is to be followed.

## OPTION A

A.1. Where feasible, contractor is to upgrade the fire alarm system one floor at a time. All full or partial fire alarm outages are to occur during minimal occupancy hours and days.

A.2. Where feasible, for replacement of the existing fire alarm panels, contractor is to leave the existing fire alarm panel "hot" and interconnect the two, new and existing panels so that they will activate each other. Then when a floor or a circuit is modified, contractor may remove it from the old and add it to the new panel. When all floors and circuits are completed, the old panel may be removed. Where this procedure is applied, fire watch requirements may be deleted in most, but not all, cases.

## OPTION B

B.1. Step One: Replace the FACP when called for in the project. Temporarily, connect the existing initiation and notification circuits to the new FACP. Use monitor ZAM's where necessary to do the temporary connections.

B.2. Step Two: Replace notification appliances. While doing so, if a fire is annunciated at the FACP, a person stationed at the FACP (panel-watcher) will contact the fire-watcher(s), e.g., using radios, and direct them to notify floor and building occupants using pre-established procedures. Use of portable loud speakers should be considered for large buildings.

B.3. Step Three: Replace initiating devices/circuits after the new notification circuit is connected to the new FACP. When fire-watcher(s) detect a fire, the firewatcher(s) will contact the panel-watcher and direct him/her to manually sound the building alarms from the FACP.

B.3.1 Step Three (Clarifications): If manual pull stations are on a separate circuit from smoke and heat detectors, "Step Three" should be broken into two parts, Step 3a: Replace manual pull stations, and Step 3b: Replace smoke and heat detectors and other initiating devices. This method provides a higher degree of safety since the occupants and fire-watcher(s) can use pull stations to notify the panel-watcher of emergency conditions.

B.3.2 Step Three (Clarifications): For fully sprinklered floors, if the water flow switch is connected and functional, the requirements of Step-3 can be substantially reduced.

B.4. The panel-watcher will be in contact with the Service Desk. If Service Desk receives an emergency call from occupants, they will contact the panel-watcher and direct him/her to sound the alarms and to notify the fire-watcher(s) to do their assigned duties.

## OPTION C:

As an alternative to options A or B above, contractor may propose other methods that provide an equal or higher level of safety and obtain project team's approval. Once project team's approval is obtained, and owner's representative issues written authorization, contractor is to use the approved alternative within its established limitations. Project team and owner's representative reserves the right to reject the proposed alternative.

## **UNPLANNED INTERRUPTIONS:**

Unplanned fire alarm and detection system outages are to be handled on a case by case basis through consultation with the Fire and Life-Safety Group (FLS) of Facilities Management. Typically for an occupied building, some type of firewatch will be required.