

3.05 New and Replacement Fire Alarm Systems: High-Rise Evacuation/Relocation Policy (2025)

Reference: 2025 San Francisco Fire Code (SFFC); SFFD Administrative Bulletins 2.01 and 3.01; 2025 NFPA 72.

Purpose: The purpose of this bulletin is to provide direction to the design community about how the San Francisco Fire Department expects notification/evacuation zones to be designed for new or replacement fire alarm systems.

Scope: This bulletin applies only to fire alarm systems in new high-rise buildings or replacement fire alarm systems in existing high-rise buildings. (Reference 2025 California Fire Code Section 907.5.2.2).

Alternate Proposals: The Fire Department recognizes that the procedures outlined below will not accommodate every situation. Variations to the evacuation/relocation schemes outlined below will be evaluated and approved on a case-by-case basis by the San Francisco Fire Department's plan review staff.

Relocation and Partial Evacuation Buildings: Buildings with relocation or partial evacuation are required to meet 2025 NFPA 72 requirements for Level 2 or 3 survivability.

The three following conditions shall apply:

1. **Four Floors Zone.** The SFFD requires a minimum of four (4) floors zone to be clear of occupants during high-rise fire emergency operation. These floors could be relocating floors or evacuating floors. These four (4) floors shall be:
 - a. the fire floor (floor of alarm initiating device activation),
 - b. two floors below the fire floor, and
 - c. the floor above the fire floor,
2. **Relocating/Evacuating Floor.** Each floor of a high-rise building shall be designated as either a relocating floor or an evacuating floor (A relocation floor cannot be an evacuating floor and vice versa).
3. **Receiving Floor.** A receiving floor could be either a relocating floor or an evacuating floor.

I. NEW HIGH-RISE BUILDINGS

1. **New High-Rise Office Buildings (B Occupancy) More Than 150 Ft. In Height.** It is the policy of the San Francisco Fire Department that when the fire alarm system is installed in a new high-rise office building, the following relocation procedure shall be followed:
 - A. **Relocation.** The activation of any fire alarm initiating device above the 7th floor will cause four floors to go into alarm and to relocate to a lower pre-assigned/receiving floor (typically 4 floors down, unless otherwise approved).

Exception: The activation of any alarm initiating device on the 6th floor or below will cause an evacuation signal on the 7th floor and below (See Example Relocation/Evacuation Matrix).

3.05 New and Replacement Fire Alarm Systems: High-Rise Evacuation/Relocation Policy (2025)

Examples:

1. **The Fire Floor is The 7th Floor.** When the fire floor is the 7th floor; The 8th floor shall relocate down to the 4th floor, floors 5, 6 and 7 shall evacuate and floors 1, 2, 3 and basement shall remain in place.
2. **The Fire Floor is The 6th Floor.** When the Fire Floor is the 6th floor; Floors 7,6,5, and 4 shall evacuate, floors 1,2,3 shall remain, and the 8th floor and above shall remain.
3. **The Fire Floor is the 2nd Floor.** When the Fire Floor is the 2nd floor; Floor 3,2, and 1 shall evacuate (as well as the basement level if applicable). Floor 4 and above shall remain.

B. **Case-By-Case.** The specific relocation/evacuation scheme described above, may be changed due to different building configurations such as buildings with combined floors, atriums, etc.

C. **Unlocked Stairway Doors.** All stairway doors in the building shall automatically unlock under any alarm condition to allow access for relocated building occupants.

2. **New High-Rise Office Buildings (B Occupancy) 150 Ft. In Height Or Less.** New high-rise office buildings that are 150 ft. or less in height may elect to use partial evacuation (a four floor zone evacuates the building) or relocation as stated above. The partial evacuation zone will include the fire floor (floor of alarm initiating device), two floors below the fire floor, and one floor above the fire floor.
3. **New High-Rise Tourist Hotels And Residential Buildings (R-1 And R-2 Occupancies).** When a fire alarm system is installed in a new high-rise R-1 tourist hotel or an R-2 residential building, the following procedure shall be followed. Any initiating device will cause four floors to go into alarm: The fire floor (floor of alarm initiating device), two floors below the fire floor, and one floor above the fire floor. The occupants on those four floors will be instructed to evacuate the building.

Relocation of occupants is not permitted in R-1 and R-2 high-rise buildings.

II. **EXISTING HIGH-RISE BUILDINGS**

1. **Existing High-Rise Office Buildings (B Occupancies) Over 150 Ft. In Height.** When a new code compliant fire alarm system, is installed, including a fire alarm control unit replacement, in an existing high-rise office building that is greater than 150 ft. in height, an Emergency Voice/Alarm Communications System shall be installed in accordance with CFC Section 1114.20 and the same relocation procedure as that for new high-rise office buildings OR, alternatively, partial evacuation (four floors) shall be followed if the building is equipped with the following:
 - A. An automatic sprinkler system throughout the building.
 - B. Two code complying enclosed exit stairs.
 - C. Emergency Voice Alarm Communication System (EVACS).
 - D. A smoke control or smoke management system that was code compliant at time of installation.
 - E. Vertical shafts that are enclosed (California Building Code Chapter 7).

3.05 New and Replacement Fire Alarm Systems: High-Rise Evacuation/Relocation Policy (2025)

ANY EXISTING HIGH-RISE BUILDING WITH A PARTIAL EVACUATION OR RELOCATION POLICY THAT IS NOT FULLY SPRINKLERED SHOULD BE BROUGHT TO THE ATTENTION OF THE FIRE MARSHAL IMMEDIATELY.

2. **Existing High-Rise Tourist Hotels And Residential Buildings (R-1 And R-2 Occupancies) Over 150 Ft. In Height.** When a new code compliant fire alarm system is installed, including a fire alarm control unit replacement, in an existing tourist hotel or in an existing residential building that is greater than 150 ft. in height, an Emergency Voice/Alarm Communications System shall be installed in accordance with CFC Section 1114.20, and the same partial evacuation procedure as that for new high-rise tourist hotel and residential buildings shall be followed if the building is equipped with the following:
 - A. An automatic sprinkler system throughout the building.
 - B. Two code complying enclosed exit stairs.
 - C. Emergency Voice Alarm Communication System (EVACS).
 - D. A smoke control or smoke management system that was code compliant at time of installation.
 - E. Vertical shafts that are enclosed (California Building Code Chapter 7).

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Relocation of occupants is not permitted in R-1 and R-2 high-rise buildings.

3. **All Other Existing High-Rise Buildings.** All other high-rise buildings shall be evaluated on a case-by-case basis. Generally, these buildings will require complete evacuation unless the Fire Marshal determines life safety would be better served with an alternative plan of action.

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III. **FACILITY EMERGENCY PLANS FOR ALL HIGH-RISE BUILDINGS**

Facility Emergency Plans (FEP's) shall be consistent with the fire alarm sequence of operation and the evacuation/relocation matrix (if applicable). Proposed FEP's for new high-rise buildings shall be submitted with the fire alarm plans submitted for review and approval by SFFD staff. For existing buildings, the approved FEP must be submitted as a reference, unless it must be revised to be consistent with the new fire alarm sequence of operation. In that case, the proposed FEP shall be submitted for review with the fire alarm plans as for new buildings. (Reference 2025 San Francisco Fire Code Section 404.1)

Warning: Do not use this bulletin when designing facility emergency plans for existing buildings with existing fire alarm systems. Existing fire alarm systems with varying notification zones may have been approved. The existing system configuration must be used unless the entire system is reprogrammed under a building permit and all required testing is performed and granted final sign-off/approval.

3.05 New and Replacement Fire Alarm Systems: High-Rise Evacuation/Relocation Policy (2025)

EXAMPLE: SFFD Relocation - Evacuation Matrix 12/8/2019
Used only For: Full Life-Safety High-Rise Office Buildings
Specific Buildings may be evaluated on a Case-By-Case Basis

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | |
|---|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| ROOF | | | | | | | | | | | RELOC | F.FLOOR | | | ROOF |
| Lvl 24 | | | | | | | | | | RELOC | F.FLOOR | RELOC | | | LVL 24 |
| Lvl 23 | | | | | | | | | RELOC | F.FLOOR | RELOC | RELOC | | | LVL 23 |
| Lvl 22 | | | | | | | | RELOC | F.FLOOR | RELOC | RELOC | | | | LVL 22 |
| Lvl 21 | | | | | | | RELOC | F.FLOOR | RELOC | RELOC | RECV | RECV | | | LVL 21 |
| Lvl 20 | | | | | | RELOC | F.FLOOR | RELOC | RELOC | RECV | RECV | RECV | | | LVL 20 |
| Lvl 19 | | | | | RELOC | F.FLOOR | RELOC | RELOC | RECV | RECV | RECV | RECV | | | LVL 19 |
| Lvl 18 | | | | RELOC | F.FLOOR | RELOC | RELOC | RECV | RECV | RECV | RECV | RECV | | | LVL 18 |
| Lvl 17 | | | RELOC | F.FLOOR | RELOC | RELOC | RECV | RECV | RECV | RECV | | | | | LVL 17 |
| Lvl 16 | | RELOC | F.FLOOR | RELOC | RELOC | RECV | RECV | RECV | RECV | | | | | | LVL 16 |
| Lvl 15 | RELOC | F.FLOOR | RELOC | RELOC | RECV | RECV | RECV | RECV | | | | | | | LVL 15 |
| Lvl 14 | F.FLOOR | RELOC | RELOC | RECV | RECV | RECV | RECV | | | | | | | RELOC | LVL 14 |
| Lvl 13 | RELOC | RELOC | RECV | RECV | RECV | RECV | | | | | | | RELOC | F.FLOOR | LVL 13 |
| Lvl 12 | RELOC | RECV | RECV | RECV | RECV | | | | | | | RELOC | F.FLOOR | RELOC | LVL 12 |
| Lvl 11 | RECV | RECV | RECV | RECV | | | | | | | RELOC | F.FLOOR | RELOC | RELOC | LVL 11 |
| Lvl 10 | RECV | RECV | RECV | | | | | | | RELOC | F.FLOOR | RELOC | RELOC | RECV | LVL 10 |
| Lvl 9 | RECV | RECV | | | | | | | RELOC | F.FLOOR | RELOC | RELOC | RECV | RECV | LVL 9 |
| Lvl 8 | RECV | | | | | | | RELOC | F.FLOOR | RELOC | RELOC | RECV | RECV | RECV | LVL 8 |
| Lvl 7 | | | | | | | EVAC | F.FL/EV | EVAC | EVAC | RECV | RECV | RECV | RECV | LVL 7 |
| Lvl 6 | | | | | | EVAC | F.FL/EV | EVAC | EVAC | RECV | RECV | RECV | RECV | | LVL 6 |
| Lvl 5 | | | | | EVAC | F.FL/EV | EVAC | EVAC | RECV | RECV | RECV | RECV | | | LVL 5 |
| Lvl 4 | | | | EVAC | F.FL/EV | EVAC | EVAC | RECV | RECV | RECV | RECV | | | | LVL 4 |
| Lvl 3 | | | EVAC | F.FL/EV | EVAC | EVAC | | | | | | | | | LVL 3 |
| Lvl 2 | | EVAC | F.FL/EV | EVAC | EVAC | | | | | | | | | | LVL 2 |
| Lvl 1 | EVAC | F.FL/EV | EVAC | EVAC | | | | | | | | | | | LVL 1 |
| Bsmt | F.FL/EV | EVAC | EVAC | | | | | | | | | | | | Bsmt |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | |
| F.FL/EV | Fire Floor Receives an Evacuation Message | | | | | | | | | | | | | | |
| F.FLOOR | Fire Floor Receives a Relocation Message | | | | | | | | | | | | | | |
| EVAC | Evacuating Floor - Will receive an evacuation message | | | | | | | | | | | | | | |
| RELOC | Relocation Floor - Will receive a Relocation Message | | | | | | | | | | | | | | |
| RECV | Receiving Floor - Will receive a Receiving Message | | | | | | | | | | | | | | |
| | Stay in Place Floor - Does not receive any Message | | | | | | | | | | | | | | |
| | Proposed symbols for Relocating and Receiving Floors at the Stairwell | | | | | | | | | | | | | | |
| Evacuation Voice Pre-Recorded Message: | | | | | | | | | | | | | | | |
| Two rounds of temporal 3 Alert-Tone shall precede and follow the message – "May I have your attention, please? May I have your attention, please? A FIRE alarm has been activated in the building. Proceed to the nearest exit and exit the building. Do not use the elevators." The message and Alert-Tone sequence shall repeat until the FA system is silenced or reset by responding Firefighters | | | | | | | | | | | | | | | |
| Relocation Voice Pre-Recorded Message: | | | | | | | | | | | | | | | |
| A Steady Alert-Tone of 1 to 3 seconds in duration shall precede and follow the message – "May I have your attention, please? May I have your attention, please? A FIRE alarm has been activated on your floor. Proceed to the nearest stairwell and walk down to your pre-assigned floor and re-enter the building. Do not use the elevators." The message and Alert-Tone sequence shall repeat until the FA system is silenced or reset by responding Firefighters | | | | | | | | | | | | | | | |
| Receiving Voice Pre-Recorded Message: | | | | | | | | | | | | | | | |
| A Steady Alert-Tone of 1 to 3 seconds in duration shall precede and follow the message – "May I have your attention, please? May I have your attention, please? A FIRE alarm has been activated on a floor above yours. Please stay in place and be prepared to receive personnel relocating to your floor". The message and Alert-Tone shall repeat until the FA system is silenced or reset by responding Firefighters. | | | | | | | | | | | | | | | |

Figure 1: SFFD Example of Relocation/Evacuation Matrix (12/8/2019)

Note: Visual fire alarm notification (strobes) shall flash anytime that a pre-recorded voice message is sound on any floor of the building (Evacuating/Relocating and Receiving Floors) to attract the attention of deaf and hard of hearing persons to seek help during emergencies. Also, it shall be required to have the strobes flash during LIVE Paging Messages when the Firefighters key (manually activate) the microphone. The strobes shall flash at the selected paging floors only and stop flashing when the firefighters un-key (deactivate) the microphone.