FIRE ALARM WORK GROUP MEETING
Meeting Minutes – September 9, 2025

Work Group Representatives
Contacts:
Chair - Crystal Sujeski, OSFM-CDA-Div. Chief, (510) 846-1276, crystal.sujeski@fire.ca.gov
Co-Chair – Travis Tyler, CSU OSF-Dir. of Fire Safety, (562) 900-3639, ttyler@calstate.edu

1. CALL TO ORDER: Sujeski called the meeting to order at 8:00 AM

A. Welcome/Introductions **Tyler/Sujeski**
B. Introductions – New participates – None
C. Agenda & Minute Review

2. OLD BUSINESS **Tyler**

A. Deadlines/Timeline – Updates
   i. CBSC – October 1st critical deadline
   ii. AB 130 effects and limits our intervening code cycle proposals
   iii. Post October Hiatus

3. NEW BUSINESS **Tyler**

A. Code Proposals - Review of Previous Code Proposals with strikeout/underline and drafted justification
   i. CBC/CFC Section 907
      1. 907.5.2.4 David Secoda – Drafted Proposal - Strike/Delete 907.5.2.4 amendment.
         a. Comments:
            i. DSA Eric Driever – DSA does not agree and desires further study. DSA enforces this fairly broadly and requires exterior notification on most buildings. And acknowledges that the language is written specifically to requiring notification on buildings adjacent to playgrounds is meeting work, but does not agree that it should just be stricken in its entirety right now.
            ii. Danijela Trubint – Modernization vs existing buildings impacts mix match systems.
            iii. David Deutsch – Bills Sound/Security – Provide comments to the document shared that align with DSA's comments.
         b. Work Group Poll – Consensus "needs further study"
            i. Opposed/Not in support - 4
            ii. Needs further study – 9
            iii. In support - 3
      2. 907.2.3.6.1 David Secoda – Drafted Proposal - Strike ceiling plenums components and 907.2.3.6.2 component for heat detectors amendments.
         a. Comments:

i. David Deutsch – Bills Sound/Security – Issue with plenum requirement. Implications to mechanical requirements.
ii. DSA Eric Driever – Was George Barnes consulted in drafting this proposal. Danijela Trubint echoed the concern.
1) David Secoda – Confirmed that George Barnes was included and provided support for the proposals.
iii. Kevin Reinertson – Need to understand the original intent and review the original rationale of the 2001-2007 amendments from the previous fire alarm work group.

b. Work Group Poll – Consensus "needs further study"
i. Opposed/Not in support - 2
ii. Needs further study - 9
iii. In support - 3

3. 907.6.4 Travis Tyler – Drafted Proposal – Revisions align and update CA amendments where model codes have evolved to include these provisions.
a. Comments:
i. Kevin Reinertson – Recommends including Cell Complex and Group L so that you don't have to justify deleting them.
ii. Sagiv Weiss-Ishai – In full support. A lot of collaboration in the proposals development.

b. Work Group Poll – Consensus "In Support"
i. Opposed/Not in support - 0
ii. Needs further study – 0
iii. In support - 8

4. 907.2.1 & 907.2.2.3 Sagiv Weiss-Ishai – Drafted Proposal modifies existing language to further clarify fire alarm requirements for Group A and B Educational Facilities.
a. Comments:
i. David Deutsch – Bills Sound/Security – Issue with eliminating early detection for life and property protection. These type of occupancy have a high concentration of occupancy.
1) Sagiv Weiss-Ishai – These requirements are more restrictive than the model language.
ii. Kevin Reinertson – This work is attempting to fit the existing amendments in where the new Group A model code provisions are. This is editorial in nature.
iii. Danijela Trubint – In support. May need further study by DSA.
iv. David Secoda – Does not believe this proposal makes the code less restrictive.

b. Work Group Poll – Consensus "In Support"
i. Opposed/Not in support - 1
ii. Needs further study – 4
iii. In support - 8
iv. -

ii. CBC/CFC Section 915
1. 915 - CO Detection - R Roberts –- Drafted Proposal Pending - No update, proponent not present. Not discussed.

iii. CBC/CFC Section 1010

1. 1010.2.13 Sagiv Weiss-Ishai – Drafted Proposal. Deleted “or heat” this was previous presented to work group with no opposition and submitted to Jena Garcia. (attached for reference)

iv. CBC Chapter 35 /CFC Chapter 80

1. CBC Chapter 35 /CFC Chapter 80 amendment to NFPA 72 (2025)-Section 12.4-Pathway Survivability - Sagiv Weiss-Ishai - Drafted Proposal brings in updated NFPA 72 provisions as CA amendments that
   a. Comments:
      i. Kevin Reinertson – Does not necessarily agree on amending the annex. Still needs discussion.
   b. Work Group Poll – Consensus “In Support”
      i. Opposed/Not in support - 0
      ii. Needs further study – 1
      iii. In support - 8

v. CFC Chapter 53

1. CFC Chapter 53 David Deutsch (Bills Sound and Security) - Drafted Proposal – Not discussed due to time. Attached for the work group review.

4. ROUNDTABLE / PUBLIC COMMENT **Tyler**

5. UPCOMING MEETING DATE FOR 2024 **Tyler**

A. Meetings will be held the bi-monthly on various Tuesdays of each month at 8-10 AM and will remain virtual

i. Upcoming Meetings – September 30th
ii. Please email Jena.Garcia@fire.ca.gov proposals to be added to the agenda.

7. MEETING ADJOURNED at 9:45 AM **Tyler**

If you would like to watch the recording of this meeting, please visit the link below:

https://youtu.be/ODbqraVPl3M

CODE CHANGE PROPOSAL

Code Section(s): CFC Section 907.2.3.6.1 and 907.2.3.6.2 (California Amendments)

PART I – CODE CHANGE (New language in RED, deleted language shown in ~~strikethrough~~ font)

Revise as follows (California Amendment):

~~**907.5.2.4 Group E schools.**~~

~~*One audible alarm notification appliance shall be mounted on the exterior of a buildings to alert occupants at each playground area*~~.

PART II – REASON STATEMENT

Background & History:

1. The amendment originated in the early 2000's with the development of the 2007 California Building Code.
2. The requirement for an exterior audible device first appeared in the 1997 Uniform Building Code (UBC), published by the International Conference of Building Officials (ICBO).
3. 1997 was the last published edition of the UBC (published by the ICBO).
4. ICBO later merged with other model code publishers to create a new model code making body - The International Code Council (ICC), publisher of the International Building Code (IBC).
5. The 1997 UBC continued as the basis for the 1998 and 2001 CBC and remained in effect until superseded by the 2007 CBC (which is based on the 2006 International Building Code).
6. During this time there was great controversy over the ICC model building code and the National Fire Protection Association (NFPA) model building code (NFPA 5000).
7. In the process of choosing a new model building code for the State of California, fire protection professionals worked to compare the last (1997) edition of the UBC and the 2006 edition of the IBC.
8. The requirement for an exterior audible is not found in the 2006 IBC, the successor to the 1997 UBC. The amendment (CBC 907.5.2.4) was most probably created **solely** because the requirement existed in the 1998 CBC (based on the 1997 UBC) but did not exist in the 2006 IBC.
9. The 2019 California Fire Code Amendments Handbook provides the following limited history for the amendment.

907.5.2.4 Group E schools. *One audible alarm notification appliance shall be mounted on the exterior of a building to alert occupants at each playground area.*

📖 *2013*

❖ The SFM is proposing modification to the above sections in coordination with the Divisions of State Architect to clarify the specific number of exterior audible alarms for playground area(s) and to clarify that all buildings do not require an exterior audible device or multiple devices.

History:

There have been a large number of projects that have been submitted for plan review where the design professional placed at least one audible device on the exterior of each building fronting a playground with audible devices on each side of the building to notify those who are "around" the area(s). This could include a group of several portable buildings, each having one to three exterior audible devices. The large number of notification devices reportedly can amplify the alarm sound up to five blocks away from the school site, often through residential areas. There have been numerous complaints from residents. The intent of the code is to notify playground occupants that there is a fire and not to enter buildings. A single device will be sufficient.

Purpose of Amendment:

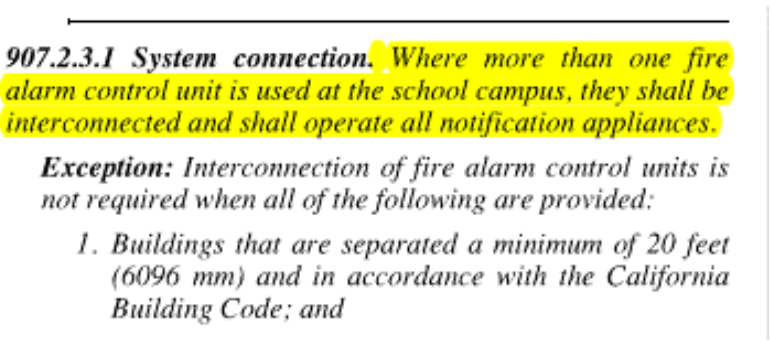
1. Eliminate an obsolete and ineffective code requirement.

Rationale:

1. Since the adoption of the 2013 California Building Code Group E buildings require Emergency Voice Alarm Communication (EVAC) type audible notification. EVAC notification uses speakers to broadcast pre-recorded or manual voice messages to occupants. Prior to the adoption of the 2013 CBC horns which sounded a tone were used for occupant notification.
    a. NFPA 72 requires that EVAC systems provide an intelligible message to occupants. A single speaker is **insufficient** to effectively (intelligibly) notify occupants in large outdoor areas, such as playgrounds, athletic fields or the like.
2. **The amendment is capricious on the whole:** The amendment is **not performance-based**. For comparison, where audible alarms are required *indoors*, the code specifies a

minimum sound level to be effective (i.e. 15 decibels above average ambient sound.) CBC 907.5.2.4 is **frivolous** in that it does not prescribe a minimum sound level. The amendment is a *location-based* requirement only.

3. The **cost** to the public **is not reasonable**, based on **questionable benefits** derived from the amendment. For example:
    a. Occupants at playground areas are not directly threatened by fires occurring within buildings.
    b. Occupants at playground areas may already be at their designated fire emergency assembly area.
    c. Exterior-mounted audible alarms are **more costly** than interior alarms.
        i. Exterior-mounted speakers are special-purpose appliances and are required to be "weatherproof". Alarms exposed to weather will deteriorate more quickly than those installed at interior areas.
        ii. Mounting speakers on the exterior of a building requires a wire penetration through the exterior wall of a building. Such penetrations are a source for water intrusion into buildings.
        iii. The additional **costs involved with requiring ineffective exterior speakers impact ALL California K-12 Schools Statewide**.
    d. The 2019 California Amendments Handbook history of the amendment is **nonsensical**. It is unlikely that an occupant *outside* a building could *unknowingly* enter a school building involved in a fire. CBC 907.2.3.1 (a separate amendment) requires that **all notification appliances operate simultaneously on a school campus**.
        i. In effect, this means that **all** notification appliances (both audible and visual) including those installed within all buildings on a school campus operate simultaneously. Where the exception to 907.2.3.1 is applicable, then notification appliances operate only in those buildings *involved* in a fire alarm event.



907.2.3.1 System connection. *Where more than one fire alarm control unit is used at the school campus, they shall be interconnected and shall operate all notification appliances.*

Exception: *Interconnection of fire alarm control units is not required when all of the following are provided:*

1. *Buildings that are separated a minimum of 20 feet (6096 mm) and in accordance with the California Building Code; and*

4. During the deliberation of this proposal, the discussion of the Work Group consistently led to the topic of "Mass Notification". Specifically, "Wide Area Mass Notification" which is a system installed to provide real-lime information to outdoor areas.

a. There are many valid reasons to consider a properly designed Wide AreaMass Notification system including:
    i. Bomb threats,
    ii. School lock downs,
    iii. Active shooter events,
    iv. Earthquake events,
    v. Severe weather events,
    vi. Lost child or missing person alerts,
    vii. Hazardous material events and
    viii. Practically any other type of emergency

5. The design of a Mass Notification system is based on a Risk Analysis conducted in accordance with NFPA 72.
    a. Mass notification is **not** required for any occupancy group. However, CFC 917.1 requires a Risk Analysis for new buildings on College and University campuses.
    b. Additionally, CFC Section 917.2 is a technical change from the previously adopted edition of the ICC.
    c. New CFC section 917.2 **requires** a risk analysis be conducted for new Group E occupancies with an occupant load of 500 or more.

PART III – COST IMPACT STATEMENT

This proposal does not increase construction costs.

Eliminating the amendment will lower costs for school districts who might otherwise be required to install ineffective outdoor speakers.

PART V – BENEFIT STATEMENT

- Technological Advancement: The change to EVAC notification systems with adoption of the 2013 CFC has made this California amendment obsolete.
- Safety: Where applicable; Group E occupancies will receive appropriate effective fire alarm protection through enforcement of new CFC Section 917.2 – a new requirement in the 2025 CFC.
- Clarity: This proposal eliminates an obsolete and ineffective requirement.
- Efficiency: Eliminating the ineffective, non-performance-based requirement reduces the cost of fire alarm systems in public schools.

CODE CHANGE PROPOSAL

Code Section(s): CFC Section 907.2.3.6.1 and 907.2.3.6.2 (California Amendments)

PART I – CODE CHANGE (New language in RED, deleted language shown in ~~strikethrough~~ font)

Revise as follows (California Amendment):

907.2.3.6.1 Smoke detectors.

Smoke detectors shall be installed at the ceiling of every room ~~and in "ceiling-plenums" utilized for environmental air. Where the ceiling is attached directly to the under-side of the roof structure, smoke detectors shall be installed on the ceiling only.~~

Exception: Where the environment or ambient conditions exceed smoke detector installation guidelines; heat detectors or fire sprinklers shall be used.

~~907.2.3.6.2 Heat detectors. Heat detectors shall be installed in combustible spaces where sprinklers or smoke detectors are not installed.~~

PART II – REASON STATEMENT

Background & History:

1. These amendments were developed by State Agencies and the California State Fire Marshal in response to the Leroy F. Greene School Facilities Act of 1998 and California Senate Bill 575 of 2001. Reference California Education Code sections 17074.50, 17074.52, 17074.54 and 17074.56 which required the State Fire Marshal to develop and approve the relevant regulations.
2. The amendments were developed in part by the California State Fire Marshal **with input from the fire alarm industry** (via the CSFM Fire Alarm Advisory Committee). Fire alarm industry members of the CSFM Fire Alarm Advisory Group interpreted the intent of the legislation to **their financial benefit** by applying the NFPA 72 definition of "Total Coverage". In the California Fire Code, the NFPA 72 definition of "Total Coverage" is **not applied in any other occupancy type**.

Purpose of Amendment:

1. Align fire detection requirements with other sections of the California Fire Code.
2. Delete excessive fire alarm detection requirements applicable to Group E occupancies.

Rationale:

1. The detection required by these amendments is **excessive.** The cost to the public is **not reasonable**, based on the **dubious benefits** derived from the amendments.
2. **Questionable benefit:** As currently implemented, these amendments result in the installation of automatic fire detection in areas of **little to no risk**, and areas that provide **little to no life/safety benefit.**
    a. In Group E occupancies, automatic heat detection is required and routinely installed in the **crawl spaces** below buildings.
    b. In Group E occupancies, automatic heat detection is required and routinely installed in the **above-ceiling spaces** of Type V, one-story, wood frame relocatable buildings of less than 1,000 square feet in area (relocatable classroom buildings).
3. **Questionable benefit:** There is no history of fires originating in crawl spaces below buildings, or above-ceiling spaces. Reference the National Fire Protection Association Report "Structure Fires in Schools"; Richard Campbell; September 2020. https://www.nfpa.org/education-and-research/research/nfpa-research/fire-statistical-reports/structure-fires-in-schools
4. These amendments are unique in the California Fire Code. The amendments **conflict with other sections of the CFC** where automatic detection is required. The added details regarding installation of smoke detectors "*...in ceiling-plenums utilized for environmental air*." and "*spaces where sprinklers are not installed*" is **unlike any other occupancy type** where smoke detection is required. For example:
    a. In Day-Care occupancies, where children sleep, there is no special consideration given to "*ceiling-plenums utilized for environmental air*." and "*spaces where sprinklers are not installed*". Reference CFC 907.2.3.9.2.
    b. In Residential occupancies, where occupants sleep, there is no special consideration given to "*ceiling-plenums utilized for environmental air" and "spaces where sprinklers are not installed*". Reference CFC 907.2.11.7.
    c. In High-Rise buildings, where floor layouts and evacuation may be complex, there is no special consideration given to "*ceiling-plenums utilized for environmental air" and "spaces where sprinklers are not installed*". Reference CFC 907.2.13.1.
    d. In Hospital occupancies, where occupants are not be capable of self-preservation, there is not special consideration given to "*ceiling-plenums utilized for*

environmental air" and "spaces where sprinklers are not installed". Reference CFC 907.2.6.2.2.

e. In High-piled combustible storage areas, there is no special consideration given to "*ceiling-plenums utilized for environmental air" and "spaces where sprinklers are not installed*". Reference CFC 907.2.15.
f. In Underground Buildings with smoke control systems, there is no special consideration given to "*ceiling-plenums utilized for environmental air" and "spaces where sprinklers are not installed*". Reference CFC 907.2.18.
g. In buildings with an engineered smoke control system, there is no special consideration given to "ceiling-plenums utilized for environmental air" and "spaces where sprinklers are not installed". Reference CFC 909.20.2.1.
h. In buildings where Delayed Egress is employed, there is no special consideration given to "*ceiling-plenums utilized for environmental air" and "spaces where sprinklers are not installed*". Reference CFC 907.3.2.

PART III – COST IMPACT STATEMENT

This proposal does not increase construction costs.

The amendment modifies existing requirements without expanding the scope of facilities regulated. By eliminating inconsistencies, the amendment will lower costs for school districts who might otherwise be required to install fire alarm detection in areas with dubious benefits

PART IV – ENVIRONMENTAL/HEALTH IMPACT STATEMENT

This proposal has no negative environmental or public health impact.

PART V – BENEFIT STATEMENT

- Safety: Ensures that group E occupancies continue to receive appropriate fire alarm protection.
- Clarity: Resolves ambiguity with other sections of the California Fire Code. Aligns fire alarm detection requirements with other sections of the California Fire Code.
- Consistency: Reduces variability across California jurisdictions.
- Efficiency: Reduces the cost of fire alarm detection systems in public schools.

8/28/2025

OSFM Fire Alarm Workgroup Code Modification Proposal

2025 CFC 907.6 Installation and monitoring.

A fire alarm system shall be installed and monitored in accordance with Sections 907.6.1 through 907.6.6.4 and NFPA 72.

2025 CFC 907.6.4 Zones.

~~*Fire alarm systems shall be divided into zones where required by this section. For the purposes of annunciation and notification, zoning shall be in accordance with the following:*~~

1. ~~*Where the fire-protective signaling system serves more than one building, each building shall be considered as a separate zone.*~~
2. ~~*Each floor of a building shall be considered as a separate zone.*~~
3. ~~*Each section of floor of a building that is separated by fire walls or by horizontal exits shall be considered as a separate zone.*~~
4. Each floor shall be zoned separately and a zone shall not exceed 22,500 square feet (2090 m^2). The length of any zone shall not exceed 300 feet (91 440 mm) in any direction.

   Exception: Automatic sprinkler system zones shall not exceed the area permitted by NFPA 13.

5. ~~For Group I-3 occupancies each cell complex shall be considered a separate zone.~~
6. ~~For Group H and L occupancies on the 11th story and above, each side of the 2-hour fire-smoke barrier shall be considered a separate zone.~~
7. ~~Annunciation shall be further divided into zones where deemed necessary by the enforcing agency.~~

Associated Modifications

2025 CFC 907.2.6.3.4 System annunciation.

A staff alerting fire alarm shall sound at all staff control stations on the floor of activation and an audible and visual signal shall be indicated on an annunciator at the facility control center upon activation of any automatic extinguishing system, automatic detection system or any smoke detector or manual actuating or initiating device. In addition, where there are staff-control stations on the floor, an audible, visual and manual alarm shall be located in each staff control station.

Fire and trouble signals of fire alarm systems and sprinkler water-flow and supervisory signals of extinguishing systems shall be annunciated in an area designated as the facility control center which shall be constantly attended by staff personnel. All such signals shall produce both an audible signal and visual display at the facility control center indicating the building, floor zone, cell complex, or other designated area from which the signal originated, in accordance with Section 907.6.4.

All local detention facilities within the scope of Section 6031.4 of the Penal Code shall have an automatic smoke detection system. A manual fire alarm-initiating device shall be installed in all guard control stations and shall be capable of alerting personnel in a central control point to the presence of fire or smoke within the facility.

2025 CFC 907.2.28 Group L.

907.2.28.1 Group L occupancies located on the 11th story and above.

1. Manual fire alarm boxes shall be required on each side of the 2-hour fire-smoke barrier and at each exit on the 11th story and above.

2. For purposes of annunciation and notification, each side of the 2-hour fire-smoke barrier shall be considered a separate zone.

2025 CFC 907.2.5 Group H.

907.2.5.1 Group H occupancies located on the 11th story and above.

1. Manual fire alarm boxes shall be required on each side of the 2-hour fire-smoke barrier and at each exit on the 11th story and above.

2. For purposes of annunciation and notification, each side of the 2-hour fire-smoke barrier shall be considered a separate zone.

Substantiation:

The California amendments to 2025 CFC 907.6.4 were added in 2006 when we transitioned from the Uniform Fire Code (UFC) to the International Fire Code (IFC). As the codes and standards have evolved over the past 10 years, many of the amendments that California needed in CFC are now included in the improved NFPA 72. The charging section of CFC 907.6 says fire alarm systems shall be installed and monitored in accordance with NFPA 72. Thus, the California amendments contained in CFC 907.6.4 can be eliminated.

Moreover, looking at the model code and intent of 907.6.4, the section addresses conventional fire alarm zone wiring, not annunciation or notification. There are separate sections in the CBC, CFC, and NFPA 72 that address annunciation and notification.

From 2024 IBC Commentary: With today's fully addressable fire alarm systems, each detector effectively becomes its own zone. The intent with zoning is to identify and limit the search area for fire alarm systems. Addressable devices will indicate the precise location of the alarm condition, thereby eliminating the need for the zoning contemplated by this section when approved by the fire code official in accordance with Section 104.11.

This proposal will simplify the code requirements by eliminating the repetitive outdated California amendments.

Each item in CFC 907.6.4 is addressed below:

907.6.4 Zones.
Fire alarm systems shall be divided into zones where required by this section. For the purposes of annunciation and notification, zoning shall be in accordance with the following:

Again, looking at the model code and intent of 907.6.4, the section addresses conventional fire alarm zone wiring, not annunciation or notification. There are separate sections in the CBC and NFPA 72 that address annunciation and notification.

1.Where the fire-protective signaling system serves more than one building, each building shall be considered as a separate zone.

This requirement can be found in 2025 NFPA 72 10.18.5.3

2.Each floor of a building shall be considered as a separate zone.

This requirement can be found in 2025 NFPA 72 10.18.5.1

3.Each section of floor of a building that is separated by fire walls or by horizontal exits shall be considered as a separate zone.

This requirement can be found in 2025 NFPA 72 10.18.5.2

4.Each zone shall not exceed 22,500 square feet (2090 m2). The length of any zone shall not exceed 300 feet (91 440 mm) in any direction.

Exception: Automatic sprinkler system zones shall not exceed the area permitted by NFPA 13.

This requirement is model code language found in 2024 IFC, no change needed.

5.For Group I-3 occupancies each cell complex shall be considered a separate zone.

As stated above, with addressable devices, each device is a zone. Fire alarm system annunciation in I-3 occupancies is covered in 2025 CBC 907.2.6.3.4 System annunciation. See proposed addition of *cell complex* to 907.2.6.3.4.

6.For Group H and L occupancies on the 11th story and above, each side of the 2-hour fire-smoke barrier shall be considered a separate zone.

As stated above, with addressable systems, each device is a zone. It is highly unlikely that a conventional fire alarm system would be installed in a high-rise group L building.

High-rise annunciation can be found in 2025 CFC 907.6.4.3 High-rise buildings zoning annunciator panel.

For the Group L specific fire alarm requirements, this fire alarm annunciation requirement would be better placed in *2025 CFC 907.2.28.1*. See proposed addition to 2025 CFC 907.2.28.1.

For the Group H specific fire alarm requirements, this fire alarm annunciation requirement would be better placed in *2025 CFC 907.2.5.1*. See proposed addition to 2025 CFC 907.2.5.1.

7.Annunciation shall be further divided into zones where deemed necessary by the enforcing agency.

Annunciation does not belong in this section. CFC 104.2 allows the enforcing agency to determine compliance and interpret the code.

Code clarification 907.2.2.3 Group B Educational facilities

CODE CHANGE PROPOSAL

Code Section(s): CFC Section 907.2.2.3 (California Amendment)

PART I – CODE CHANGE (New language in RED)

Revise as follows (California Amendment):

907.2.2.3 Group B Educational occupancies.

Group B educational occupancies for students above the 12th grade shall be provided with a manual fire alarm system. This provision shall apply to, but shall not necessarily be limited to, every community college and university.

NOTE: This provision shall not apply to privately owned trade or vocational schools or any firm or company which provides educational facilities and instructions for its employees.

Exception:

Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.

Rationale:

907.2.1 Group A.

A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group A occupancies where the occupant load due to the assembly occupancy is 300 or more, or where the Group A occupant load is more than 100 persons above or below the lowest level of exit discharge. Group A occupancies not separated from one another in accordance with Section 707.3.10 of the California Building Code shall be considered as a single occupancy for the purposes of applying this section. Portions of Group E occupancies occupied for assembly purposes *with an occupant load of less than 1000* shall be provided with a fire alarm system as required for the Group E occupancy.

907.2.1.1 Group A educational occupancies
Group A educational occupancies for students above the 12th grade shall be provided with a manual fire alarm system. This provision shall apply to, but shall not necessarily be limited to, every community college and university.

NOTE: This provision shall not apply to privately owned trade or vocational schools or any firm or company which provides educational facilities and instructions for its employees.

Exceptions:

1. Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.
2. Manual fire alarm boxes and the associated occupant notification system or emergency voice/alarm communication system are not required for Group A-5 outdoor bleacher-type seating having an occupant load of greater than or equal to 300 and less than 15,000 occupants, provided that all of the following are met:
   2.1. A public address system with standby power is provided.
   2.2. Enclosed spaces attached to or within 5 feet (1524 mm) of the outdoor bleacher type seating compose, in the aggregate, a maximum of 10 percent of the overall area of the outdoor bleacher-type seating or 1,000 square feet (92.9 m^2), whichever is less.
   2.3. Enclosed accessory spaces under or attached to the outdoor bleacher-type seating shall be separated from the bleacher-type seating in accordance with Section 1030.1.1.1.
   2.4. All means of egress from the bleacher-type seating are open to the outside.
3. Manual fire alarm boxes and the associated occupant notification system or emergency voice/alarm communication system are not required for temporary Group A-5 outdoor bleacher-type seating, provided that all of the following are met:
   3.1. There are no enclosed spaces under or attached to the outdoor bleacher-type seating.
   3.2. The bleacher-type seating is erected for a period of less than 180 days.
   3.3. Evacuation of the bleacher-type seating is included in an approved fire safety plan.

Rationale:

PART II – REASON STATEMENT

Background & History:

- First introduced in 2010 CFC 907.2.2
- ISOR language as follows:

  The SFM is proposing to add item 4 to reference provisions for Group B educational facilities currently regulated in Section 907.2.3.2 which is being relocated to 907.2.2.2. The provisions contained in 907.2.3.2 that are being relocated to 907.2.2.2 are inappropriately located under the Group E occupancy provisions. This relocation correctly locates the provisions to Group B occupancies containing educational facilities, community colleges and universities. The SFM is further proposing to modify this section for clarification by deleting provisions for elementary schools and high schools that are regulated under Section 907.2.3 and deleting the reference to Section 907.3, which pertains to existing schools.

  Here is the California specific fire alarm sections from 2007 CFC which included community colleges and universities to follow group E fire alarm system requirements (regardless of occupancy classification).

907.2.2 Group B. A manual fire alarm system shall be installed in Group B occupancies having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.

Exception: Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system and the alarm notification appliances will activate upon sprinkler water flow.

907.2.3 Group E. A manual *and automatic* fire alarm system shall be installed in Group E occupancies *with an occupant load of 50 or more persons or containing more than one classroom or one or more rooms used for day care purpose.* When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system.

Exceptions:

1. Manual fire alarm boxes are not required in Group E occupancies where all of the following apply:
   1.1. Interior corridors are protected by smoke detectors with alarm verification.

office approved by the fire enforcing agency.

907.2.3.2 School fire alarms. *Except as provided in Section 907.3, every building used for educational purposes, regardless of occupancy classification shall be provided with an approved fire alarm system. This provision shall apply to, but shall not necessarily be limited to, every elementary school, high school, community college and university.*

Exception: *Privately owned trade or vocational schools or any firm or company which provides educational facilities and instructions for its employees.*

907.2.3.3 Notification. *The system notification shall be consistent with the requirements for audible and visible notification requirements of Section 907 and NFPA 72 as amended in Chapter 35. Audible notification shall comply with the American National Standards Institute (ANSI) S3.41 Emergency Evacuation Signal. An audible alarm notification appliance shall be mounted on the exterior of buildings to alert occupants in and around the playground area.*

907.2.3.4 Annunciation. *Annunciation of the fire alarm system shall comply with the requirements of Section*

- Prior to the **2010 California Fire Code**, requirements under section 907.2.3.2 fire alarm systems were primarily focused on every building used for educational purposes, regardless of occupancy classifications.
- California identified a regulatory gap for **adult education, vocational training centers, and similar facilities classified as Group B**, which often resembled Group E in terms of occupant risk and density.
- The **2010 CFC California Amendment** introduced Section 907.2.2.2 to address this gap, ensuring that Group B classrooms with significant occupant loads would be provided with fire alarm systems.
- Through subsequent code cycles (**2010, 2013, 2016, 2019, 2022**), California has consistently maintained this provision, recognizing its life safety value.
- OSFM code interpretation 17-003 clarifies that the term *"automatic fire alarm system"* is intended to mean an *"automatic smoke detection system."* The phrase *"automatic fire alarm system"* originates from the statutory language used in the Education Code (e.g., Section 17074.50) and the Health and Safety Code (e.g., Section 13131.5). Unless specifically exempted, the requirements for an automatic fire alarm system shall not be used as a substitute for an automatic sprinkler system with fire alarm notification appliances.
- **Justifications for proposed changes:**
- **907.2.2.3. Group B Educational facilities (CA Amendment)** The intent of this proposal is to provide greater clarity and guidance within this section, ensuring consistent interpretation and application across all jurisdictions.
- **907.2.2.3.1 Exception 1** The intent of this proposal is to recognize that fully sprinklered buildings provide adequate protection and occupant notification. This exception also aligns with the International Fire Code (IFC) and other applicable sections of the California Fire Code (CFC).
- **Problem:**
  Current code language has led to **inconsistent enforcement** across jurisdictions. Some apply it to all educational use within business occupancies, while others only to post-secondary education facilities. This inconsistency delays plan approvals and imposes unnecessary costs on occupancies not intended to be regulated.

Purpose of Amendment:

- Clarifies that the requirement applies to **Group B educational occupancies with assembly-like classroom uses**, not incidental small training rooms.
- Reinforces the **original legislative intent** of California amendments: to capture **adult and nontraditional educational uses** that pose similar risks as Group E, while avoiding overreach into ordinary business functions.
- Improves **statewide consistency** for designers, engineers, and enforcement officials.

PART III – COST IMPACT STATEMENT

This proposal does not increase construction costs.
The amendment clarifies existing requirements without expanding the scope of facilities regulated. By reducing inconsistent interpretations, the amendment will lower costs for applicants who might otherwise be required to install unnecessary fire alarm systems in small educational use buildings.

PART IV – ENVIRONMENTAL/HEALTH IMPACT STATEMENT

This proposal has no negative environmental or public health impact. Clarification of fire alarm requirements will enhance **life safety protection** for adult learners and training facility occupants while maintaining reasonable application of the code.

PART V – BENEFIT STATEMENT

- **Safety:** Ensures group B educational occupancies receive appropriate fire alarm protection.
- **Clarity:** Provides clear thresholds (≥ 50 occupants) for enforcement.
- **Consistency:** Reduces variability across California jurisdictions.
- **Efficiency:** Supports timely plan review and permit issuance.

Outlook

FW: Fire Alarm work group proposal for delayed egress code change for the 2025 intervening code

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Subject: Fire Alarm work group proposal for delayed egress code change for the 2025 intervening code

Hi Crystal and Travis,

Based on our FA Work Group meeting yesterday – It seems that everyone on the group is in favor of this proposal to delete the OR HEAT language from CFC Section 1010.2.13

You asked me to add to the rationale that a throughout sprinkler system is already a heat detection system and therefore it is not beneficial to add a heat detection system to a throughout NFPA 13 sprinkler system. Which I did.

I recommend that we move this proposal as an agreed consensus proposal by the FA work group to be implemented as a change in the 2025 Intervening CFC

This is the proposed language with the change include

[BE] 1010.2.13

Delayed egress. Delayed egress locking systems shall be permitted to be installed on doors servingthe following occupancies in buildings that are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and an approved automatic smoke or heat detection system installed in accordance with Section 907

Rationale for this proposal to delete the "or heat" from CFC Section 1010.2.13

In CA – The requirement for delayed egress automatic FIRE detection exceeds the IFC (model code) requirement which allows either sprinkler system OR smoke/heat detection

CA requires the addition of smoke or heat detection in addition to the sprinkler protection. However, since the sprinkler system (throughout the building per 903.3.1.1) is already a heat detection system – There is no benefit for adding automatic heat detection system throughout the delayed egress occupancy in addition to the sprinkler protection.

The significant benefit for automatic smoke detection is the quick detection of smoke and this is an addition to the automatic sprinkler system which works upon heat detection. Therfore, deleting the "Or heat" will NOT permit

addition of heat detectors to a sprinkler system and will only require smoke detection (quick automatic fire detection)

Reference material

This is the current 2025 CFC

[BE] 1010.2.13

Delayed egress. Delayed egress locking systems shall be permitted to be installed on doors servingthe following occupancies in buildings that are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and an approved automatic smoke or heat detection system installed in accordance with Section 907

This is from the model code 2024 IFC

[BE] 1010.2.12 Delayed egress.

Delayed egress electrical locking systems shall be permitted on doors in the means of egress serving the following occupancies in buildings that are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or an approved automatic smoke or heat detection system installed in accordance with Section 907 :

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Proposed amendment to CFC Chapter 80 – Amend NFPA 72-2025 Section 2.4.2 Based on SIG-PRO APPROVED First Revision # 5024

12.4.2 Pathway Survivability Level 1.
Pathway survivability Level 1 shall consist of ~~pathways~~ one of the following:
(1) Pathways in buildings that are fully protected by an automatic sprinkler system in accordance with NFPA 13 with any interconnecting conductors, cables, or other physical pathways protected by metal raceways or metal armored cables.
(2)* Pathways in buildings that are protected by an automatic sprinkler system in accordance with NFPA 13R with any interconnecting conductors, cables, or other physical pathways protected by metal raceways or metal armored cables and are installed in sprinkler protected areas only.

Rationale:
This proposal is anticipated to be in the 2028 edition of NFPA 72. (Already passed the first draft technical committee vote and is published on the First Draft report)
The intent of this proposal to be included in the 2025 intervening cycle in CA is to reduce costs for building owners prior to the adoption of the 2028 edition of NFPA 72.

This proposal will reduce installation costs for building owners and will help Fire Alarm and Two-Way Communication systems designers to design and utilize level 1 survivability in buildings protected with NFPA 13R systems.

Some low-rise residential buildings having NFPA 13R systems could potentially employ partial evacuation or relocation of occupants. For these buildings the ECS system must have survivable pathways with Level 1 pathways installed in metallic raceways or armored cables, while the building is protected by an NFPA 13R system. In this case, the ECS pathways should only be installed in sprinklered protected areas and should not be installed in non-sprinklered attics or other spaces. This will have an equivalent protection to an NFPA 13 system. Per this proposal, Level 1 pathways will be permitted to be installed inside walls outside the attic area.

Also, many other low-rise residential buildings that are protected by NFPA 13R and have less than 2-HR fire rated construction typically employ total building evacuation upon fire alarm initiation, and are not required to have protected pathways for the fire alarm system (Level - 0 survivability). However, pathway survivability is required for the Two-Way Emergency Communications Systems installed in these buildings, such as the elevator-landing communications system, the emergency responder radio communications enhancement system (ERCES), and other ECS systems included in 24.10. For these ECS systems, when Level 1 pathway survivability is required, it should be permitted to have the pathways installed in metallic raceways or provided with armored cables in an NFPA 13R protected building.

This level of sprinkler protection (NFPA 13 and NFPA 13R) is also in accordance with the IBC and IFC allowing provisions for both these types of sprinkler systems to be used as an acceptable protection level for life safety purposes.

CFC section 5307.3.2 Gas Detection System for CO2 systems used in Beverage Dispensing

I would like to add this item to the agenda. I have request a Code Interpretation and received an answer that did not relate the to the code section nor clarified what is needed.

For reference:

5307.3 Insulated Liquid Carbon Dioxide Systems Used in Beverage Dispensing Applications

Insulated liquid carbon dioxide systems with more than 100 pounds (45.4 kg) of carbon dioxide used in beverage dispensing applications shall comply with Section 5307.3.1.

The fall back answer is that gas detection systems are not to be monitored by the fire alarm system.

5307.3.1 Ventilation

Where insulated liquid carbon dioxide storage tanks, cylinders, piping and equipment are located indoors, rooms or areas containing storage tanks, cylinders, piping and equipment, and other areas where a leak of carbon dioxide is expected to accumulate, shall be provided with mechanical ventilation in accordance with Section 5004.3 and designed to maintain the room containing carbon dioxide at a negative pressure in relation to the surrounding area.

Exception: A gas detection system complying with Section 5307.3.2 shall be permitted in lieu of mechanical ventilation.

5307.3.2 Gas Detection System

Where ventilation is not provided in accordance with Section 5307.3.1, a gas detection system shall be provided in rooms or indoor areas and in below-grade outdoor locations with insulated carbon dioxide systems. Carbon dioxide sensors shall be provided within 12 inches (305 mm) of the floor in the area where the gas is expected to accumulate or other approved locations. The system shall be designed as follows:

1. Activates an audible and visible supervisory alarm at a normally attended location upon detection of a carbon dioxide concentration of 5,000 ppm (9000 mg/m3).
2. Activates an audible and visible alarm within the room or immediate area where the system is installed upon detection of a carbon dioxide concentration of 30,000 ppm (54 000 mg/m3).

What is a "*supervisory alarm*"?

A supervisory alarm is not defined in CFC. "*Supervisory Signal*" is defined in CFC as "*a signal indicating the need of action in connection with the supervision of guard tours, the fire protection systems or equipment, or the maintenance features of related systems*"

And there is nothing in this subsection to prohibit the Supervisory condition from being sent to an alarm monitoring station.

Thus, I suggest that the word "Alarm" should be changed to "Signal" to clarify the signal originating from the Gas detection System.

What is a "*a normally attended location*"?

A normally attend location is not defined in CFS. From what I can determine, the intent is to have staff trained in the specific hazard to respond to the supervisory alarm. However, most the Liquid Carbon Dioxide Systems used in Beverage Dispensing Applications, that I have run across, are located in restaurants, bars, and concessions stands, etc. that do NOT have staff trained to respond to this hazardous condition and may not have anyone present to receive the signal when activated. Not responding to the condition does not make it disappear.

CFC dose define "*Constantly Attended Location" as* "A *designated location at a facility staffed by trained personnel on a continuous basis where alarm or supervisory signals are monitored and facilities are provided for notification of the fire department or other emergency services.*"

Thus, I suggest that the word "normally" be changed to "constantly". This will allow for trained personnel to respond, if available, or to notify the fire department or other emergency services as

Like to add a sentence at the end of subsection 1 to the effect of:

"*Upon receipt of a Supervisory Condition, notification shall be made for trained facility staff, fire department, or other emergency services to respond as the fire official may direct.*"