

# The National Fire Alarm Code - NFPA 72

Proposed Changes for 2002

*AFAA/SFPE*

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# Manual of Style Changes

- Chapter 1: Administration
- Chapter 2: Referenced Publications
- Chapter 3: Definitions
- Chapter 4: Fundamentals
- Chapter 5: Initiating Devices for Fire Alarm Systems
- Chapter 6: Protected Premises Systems
- Chapter 7: Notification Appliances for Fire Alarm Systems



# Manual of Style Changes

- Chapter 8: Supervising Station Systems
- Chapter 9: Public Fire Reporting Systems
- Chapter 10: Inspection, Testing and Maintenance
- Chapter 11: Single- and Multiple-Station Alarms and Household Fire Alarm Systems
- Annexes



# New Definitions (Ch. 3)

- Average ambient sound level
- Box Battery (deleted)
- Compatible Equip. (deleted)
- Numerous definitions supporting the rewritten Household Fire Warning Chapter
- Effective Masked Threshold
- Evacuation Signal Zone
- Satellite Trunk (deleted)
- Voluntary add to definition of Nonrequired Systems

# Fundamentals(Ch. 4)

- Qualifications of Designers moved from Annex to body of Code.(Pr.72-63a)
- Requirement for submission of shop drawings to AHJ's upon their request prior to installation. Also identifies content of shop drawings in Annex.(Pr.72-67)



# Fundamentals(Ch. 4)

- Significant revision to Power Supplies.(Pr.72-69)
  - ✦ More performance oriented.
  - ✦ 24hr maximum secondary supply
- Installation date required on batteries for maintenance purposes.(Pr.72-84)
- Max. Time Delay(Pr.72-92&92a)
  - ✦ Initiating Device to Local Fire Safety Function **OR** to Notification and Annunciation
  - ✦ 10 seconds (as of 1/1/02)



# Fundamentals(Ch. 4)

- Revisions to clarify that non-latching and latching supervisory signals are allowed. (Pr.72-95a)
- Revisions to clarify that positive alarm sequence is permitted with voice/alarm signaling and other systems that may be used for selective notification. (Pr.72-104,105&107)



# Fundamentals(Ch. 4)

- Delay of transmission of Primary Power failure signals revised to range of 60 to 180 min. versus 25 to 50% battery depletion and application extended to all supervising station systems. (Pr.72-123)

# Fundamentals(Ch. 4)

- Revisions to Record of Completion Form. (Pr. 72-131 through 139)
  - ✦ Clarify Inspection & Testing Form to be part of Record of Completion.
  - ✦ Added gate valve supervisory switches and PIV's.
  - ✦ Some reorganization for ease of use.

# Fundamentals(Ch. 4)

- New requirement that a record copy of the site-specific software of software-based systems be provided to the owner upon final acceptance testing. (Pr.72-140)
- New requirements on handling impairments proposed. Most likely will not be adopted do to scope concerns. (Pr. 72-143)

# Fundamentals(Ch. 4)

- Proposal to allow AHJ to require Third Part verification of fire alarm systems as compliant with NFPA 72. (Pr.72-145)

# Initiating Devices (Ch. 5)

- Move to make Chapter more performance based. (Pr.72-147)
- New requirement that initiating devices used to activate extinguishing systems be marked. (Pr.72-150)

# Initiating Devices (Ch. 5)

- Changes to maximum ceiling temperatures in Table 2-2.1.1.1. (Pr. 72-152)
  - ✦ Temperatures increased to allow a 136 degree heat detector in areas having a maximum ceiling temperature of 115 degrees.
  - ✦ Other temperatures also modified.

# Initiating Devices (Ch. 5)

- The requirement for heat detectors to be marked with their thermal response coefficient has been deleted due to there being no current acceptable method of measurement. (Pr.72-156a)

# Initiating Devices (Ch. 5)

- A new section was added to clarify that reduced spacing of smoke detectors is not required in mechanical rooms when they are used as return air plenums. (Pr.72-178a)

# Initiating Devices (Ch. 5)

- New requirement for signage at manual fire alarm boxes telling occupants to leave building and notify fire department when the box does not cause transmission of an off-site alarm. (Pr.72-185)



# Protected Premises(Ch. 6)

- Deleted requirement that software and firmware of fire alarm systems be listed for use with the fire alarm control unit. (Pr.72-200&201)
- "Voluntary" add to "Nonrequired."  
(Pr.72-203)



# Protected Premises(Ch. 6)

- Exception allowing Class A circuits to run together in a 2hr rated cable assembly or 2 hr rated assembly eliminated to address potential of mechanical damage to both runs.

(Pr.72-211)



# Protected Premises(Ch. 6)

- Revisions to the requirements for survivability. (Pr.72-198a,269,281,288)
  - ✦ Allows performance alternatives approved by AHJ?
  - ✦ Survivability required for fire alarm systems connecting to smoke control circuits.
  - ✦ Circuits in metal raceways allowed in sprinklered buildings in lieu of 2hr protection under various conditions.



# Protected Premises(Ch. 6)

- New exception added to clarify that voice/alarm systems are permitted to have both selective notification and positive alarm sequence. (Pr.72-274)
- Revision requiring 60 seconds of the temporal evacuation signal prior to voice evacuation message when a voice/alarm communication system is used for evacuation. (Pr.72-275)



# Protected Premises(Ch. 6)

- New Annex material to elevator lobby smoke detector requirement indicating that smoke detectors should not be installed in outdoor locations such as open parking structures and unenclosed elevator lobbies. (Pr.72-294)

# Protected Premises(Ch. 6)

- New paragraph requires the use of heat detectors in sprinklered elevator pits for recall of elevators. Guidance on detector placement and recall arrangement is also provided. (Pr.72-296)

# Notification Appliances (Ch. 7)

- Specific criteria for intelligibility of all emergency voice/alarm communication systems. (Pr.72-319)
  - ✦ 0.70 Common Intelligibility Scale (CIS) of B3 of IEC 60849, Sound Systems for Emergency Purposes.

# Notification Appliances (Ch. 7)

- New section allowing elimination of audible signaling subject to AHJ approval when visual signaling is provided in the public mode. (Pr.72-320)
- Performance based alternative for visual appliances moved from Annex to the body of the Code. (Pr.72-338)



# Notification Appliances (Ch. 7)

- All visible notification appliances in corridors required to be synchronized regardless of whether they are in a single field of view.  
(Pr. 72-352a)
- Permits visual appliance placement in corridor on end wall or side wall.  
(Pr. 72-354)



# Notification Appliances (Ch. 7)

- Deleted section addressing placement of visuals in concentrated viewing path ( i.e. classrooms, etc.). (Pr.72-358)
- Standard Fire Service Interface added to the Annex. (Pr.72-361)

# Supervising Station(Ch. 8)

- New paragraph recognizing that a central station can subcontract as other prime contractors are allowed. (Pr.72-367)
- Changes from 1hr to 2 hrs the time allowed for a runner or technician to arrive for reset after alarm, investigation, or reset after testing. (Pr.72-371,372,&373)



# Supervising Station(Ch. 8)

- New requirements for remote station systems. (Pr.72-381)
  - ✦Certificated or placarded.
  - ✦Must indicate supervisory condition at a location remote from the protected premises.

# Public Fire Reporting Systems(Ch. 9)

- Primarily editorial changes



# Inspection, Test & Maintenance(Ch. 10)

- Revised qualifications for service personnel. (Pr.72-428&430)
  - ✦NICET and IMSA Level II

# Inspection, Test & Maintenance(Ch. 10)

- Revisions to requirements for reacceptance testing to be more focused on components affected.  
(Pr.72-431)
  - ✦ 100 percent testing of added equipment.
  - ✦ Entire reacceptance test not required.

# Inspection, Test & Maintenance(Ch. 10)

- Intelligibility testing still needs to be addressed. Annex material added by committee that references subject based testing and quantitative testing. (Pr.72-443)

# Single- & Multiple-Station Alarms and Household Fire Alarm Systems (Ch. 11)

- Rewritten back to prescriptive requirements from performance-based requirements.



# Premises Security

- “The Committee shall have the primary responsibility for documents on the overall security program for the protection of premises, people, property and information specific to a particular occupancy. The Technical Committee shall have responsibility for the installation of premises security systems.”



# Premises Security TG Recommendations

- Scope of the project limited to installation methodologies
- Start out with the preparation of a single document and the document
- Single technical committee
- Produce a “Standard” instead of a “Recommended Practice”



# Premises Security

- Administration
- Reference publications
- Definitions
- Fundamentals
  - ✦ Common system requirements
  - ✦ Power supplies
  - ✦ Wiring
  - ✦ Documentation
- Detection



# Premises Security

- Access control
- Signal communication
- Voice communication
- Video Assessment and Surveillance systems
- Integrated security systems
- Other physical security features
- Commissioning and training
- Testing and maintenance



# Premises Security

- Project still in it's formative stage.
- Potentially developing installation standards and occupancy based code requirements concurrently.
- Stay tuned.



*Thank You*

