New 10th Edition of ANSI/UL 864 – Standard for Safety for Control Units and Accessories for Fire Alarm Systems

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Agenda

Background

NFPA 72, National Fire Alarm and Signaling Code

NFPA 720, Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment

NFPA 92, Standard for Smoke Control Systems

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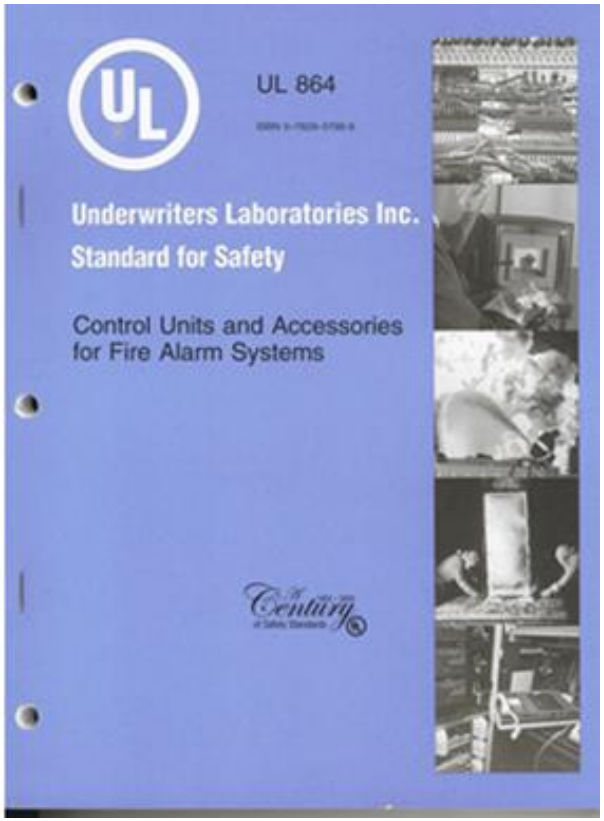
Equipment standard

- Construction
- Risk of fire hazards
- Risk of shock hazards
- Reliability
- Installation docs
- Operation



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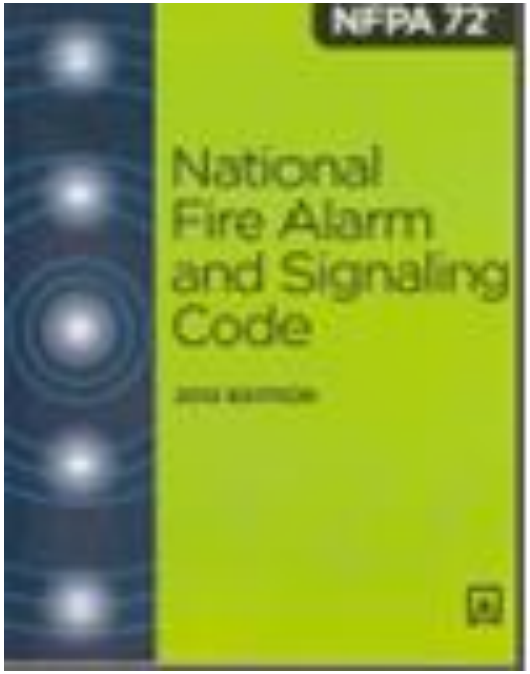
Align with national installation Codes and Standards

- NFPA 72, National Fire Alarm and Signaling Code
  - Chapters 7, 10, 12, 14, 21, 23, 24, 26



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NFPA 92, Standard for Smoke Control Systems

NFPA 720, Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment

NFPA 70, National Electrical Code

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Releasing and Suppression standards

NFPA 12, Carbon Dioxide Extinguishing Systems;

NFPA 12A, Halon 1301 Fire Extinguishing Systems;

NFPA 13, Installation of Sprinkler Systems;

NFPA 15, Water Spray Fixed Systems for Fire Protection;

NFPA 16, Installation of Foam-Water Sprinkler and Foam-Water Spray Systems;

NFPA 17, Dry Chemical Extinguishing Systems;

NFPA 17A, Wet Chemical Extinguishing Systems;

NFPA 750, Standard for Water Mist Fire Protection Systems

NFPA 2001, Clean Agent Fire Extinguishing Systems; and

NFPA 2010, Standard for Fixed Aerosol Fire Extinguishing Systems.

UL 864 – 10th Edition

- 325+ clauses revised, added, deleted
- Changes include:
  - Align with national installation standards, guidelines and codes
  - Incorporate ANSI/UL 1481, Standard for Safety for Power Supplies for Fire Protective Signaling Systems
  - Incorporate ANSI/UL 1711, Standard for Safety for Amplifiers for Fire Protective Signaling Systems
  - Update for newer technologies, miscellaneous revisions

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NFPA 72 - National Fire Alarm and Signaling Code

Low Power RF Signaling

- Minimum time for reporting inoperative transmitter now 200 s.
- Same timing as wired pathway monitoring for integrity
- Technology Update: Spread spectrum

NFPA 72 - National Fire Alarm and Signaling Code

Pathways

- Revised class designations
- Elimination of some styles

NFPA 72 - National Fire Alarm and Signaling Code

Old designations						New Designation
IDC	NAC	SLC	Smoke Control	Releasing Devices	Supplementary	
Style B and C/Class B	Style Y/Class B	Style 4/Class B				Class B
Style D and E/Class A	Style Z/Class A	Style 6/Class A				Class A
-	-	Style 7/Class A				Class X
			End to end verification			Class C
				Fail safe		Class D
					Non-supervised	Class E

NFPA 72 - National Fire Alarm and Signaling Code

Local Applications

•Capability to simultaneously deactivate both audible and visible actuated appliances.

•Re-annunciation of “silenced” yet active supervisory and alarm signals at the operator interface every 24 hrs.

NFPA 72 - National Fire Alarm and Signaling Code

System to system interconnection/interoperability

•Additional compatible system information (manufacturer name and model no.)

•Installation documentation for one or both compatible systems also to include the software/firmware level for compatible products.

NFPA 72 - National Fire Alarm and Signaling Code

Product installation documentation

- Option to provide installation instructions/wiring diagram in electronic media

- New 20% minimum safety margin for rechargeable standby batteries

NFPA 72 - National Fire Alarm and Signaling Code

Combination Systems

•Operation and monitoring for ground faults in circuits and products incorporating non-fire alarm signaling

•Methods for compliance

- Installation documentation
- Testing

NFPA 72 - National Fire Alarm and Signaling Code

Off-premise and supervising station equipment

- Transmitted alarm signals have capability to include address or zone
- Second path for DAC cannot be dial up telephone path
- DAC/Performance Based transmission path supervision reduced from 24 hours to maximum 6 hours

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NFPA 720 - Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment

Carbon Monoxide Signaling

- ANSI/UL 2075: Capability for CO Alarm signal
- T4 pattern
- Priority and distinct signaling
- Monitoring for integrity of pathways to CO initiating devices/notification appliances
- Supervisory Signal from ANSI/UL 2034 CO alarms
- Secondary power

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NFPA 92 - Standard for Smoke Control Systems

- Minimum operation following 15 minutes of primary power loss – “components automatically performing their functions”

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