

# Technical Interim Amendment District Master Specification SECTION 28 31 00 FIRE ALARM AND SMOKE DETECTION SYSTEMS 2023 Edition

Building Code Services BCS issues the following Technical Interim Amendment TIA to the 2023 edition to District Master Specification 236410. This TIA was reviewed by BCS and approved for use in all district facilities and project specifications. This change to the DMS is scheduled for permanent adoption in the 2026 revision of the District Master Specification.

## TIA 283100-23-1

### Issue Date: December 4<sup>th</sup>, 2023

### Effective Date: December 4<sup>th</sup>, 2023

Note: The proposed changes are in legislative text format. New wording is <u>underscored</u> and strike-through indicates <del>deleted</del> text. Associated text and section numbers are included to provide context to the change location within the specification.

#### PART 1 GENERAL

## 1.3 REGULATORY REQUIREMENTS

- A. System: UL listed
- B. Conform to requirements of NFPA 101
- C. Conform to requirements of NFPA 72
- D. Conform to requirements of NFPA 1
- E. Florida Building Code (FBC)
- F. Americans with Disabilities Act (ADA)
- G. Life Safety Code NFPA 101: Positive Alarm Sequence is required by SDPBC.
- H. <u>National Fire Alarm and Signaling Code NFPA 72, Article [23.8.1.2.1]: Positive Alarm Sequence is</u> approved and permitted by the authority having jurisdiction, SDPBC.

#### 1.4 SYSTEM DESCRIPTION

- A. Fire alarm/Emergency Voice Communication Panel: Non-coded, supervised, electrically impulse, manually operated fire alarm system with voice evacuation notification.
- B. Additions to a system: U.L. listed for use with the existing system manufacturer's control panel.
- C. System Supervision
  - 1. Provide electrically supervised system, with supervised alarm initiating and alarm signaling circuits.
  - 2. Occurrence of single ground or open condition in initiating or signaling circuit places circuit in TROUBLE mode.
  - 3. Component or power supply failure places system in TROUBLE mode.

- 4. Occurrence of single ground or open condition on alarm initiating circuit does not disable that circuit from transmitting in ALARM.
- 5. Occurrence of single ground or open condition on signaling circuit does not disable that circuit from transmitting in ALARM.
- D. <u>A newly installed, replaced, or upgraded fire alarm system shall be programmed for Positive Alarm</u> Sequence, in accordance with NFPA 72-Chapter 23-Article [23.8.1.2].
- E. Alarm Sequence of Operation: Actuation of manual fire alarm station or automatic initiating device causes system to enter ALARM, which includes the following operations:
  - 6. Sound and display local fire alarm signaling devices with non-coded march time signal.
  - 7. Transmit non-coded signal to remote security monitoring equipment.
  - 8. Indicate location of device that is in alarm on fire alarm control panel and the alarm zone on remote annunciator panel.
  - 9. Transmit signals to building elevator control panel to initiate return to main floor or alternate floor.
  - 10. Transmit signal to building mechanical systems to initiate shutdown of fans and damper operation.
  - 11. Transmit signal to release door hold-open devices.
  - 12. Transmit signal to all gas-valve shutoff devices, and other auxiliary equipment.
  - 13. Accomplish all incidental functions required by FBC, NFPA 72, and NFPA 101.
  - 14. The system shall provide a three-pulse temporal signal to the horns or voice evacuation system. A switch shall be provided on the control panel for silencing the alarm devices. Any additional incoming alarm shall operate normally. Each alarm shall be represented on the control panel by an audio and visual indication.
- F. Alarm Reset: Key-accessible RESET function resets alarm system out of ALARM if alarm-initiating circuits have cleared.
- G. Trouble Sequence of Operation: System trouble, including grounding or open circuit of supervised circuits, or power or system failure causes system to enter TROUBLE mode, including the following:
  - 15. Visual and audible trouble alarm by specific device at control panel
  - 16. Visual common trouble signal at annunciator panel
  - 17. Manual ACKNOWLEDGE function at control panel silences audible trouble alarm; visual alarm is displayed until initiating trouble is cleared.
  - 18. Transmit common trouble signal to remote security monitor control.
- H. Lamp Test: Manual LAMP TEST function causes alarm indication at each zone at fire alarm control panel and at annunciator panel.
- I. A connection to the chemical fire extinguisher system of the kitchen so that the auxiliary alarm contacts of the extinguisher control initiates the fire alarm system.
- J. Provide for future circuit wiring a compliment of all the conductors needed for all types of initiation, signal, and auxiliary functions from the control panel to designated future portable locations.
  - 1. Provide the termination point in the closest building terminal boxes to the future site.
  - 2. Provide one extra initiation point or address for future feeds in the program.
  - 3. Provide one extra notification circuit for future feeds in the program.