Educational Session

Combination Alarm Systems
for Fire and Security

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Combination Alarm Systems
for Fire and Security

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Welcome and Biography

Tom Parrish, SET, CFPS, PSP
VP, Telgian Holdings

Tom Parrish has more than 30 years' experience in fire protection and emergency response and is the Retired Fire Marshal for Putnam Township Michigan. He serves on several NFPA technical committees including NFPA 72 Signaling Systems for the Protection of Life and Property and Emergency Communications Systems. He is currently serving as Past President of AFAA and is a senior instructor for NFPA. His professional credentials include Level IV NICET Certified Fire Alarm Technician, Level III NICET Inspections and Testing, Certified Fire Protection Specialist and Master Electrician. He is board certified as a Physical Security Professional by ASIS and holds a bachelor's in Industrial Technology from Kean University.

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National Fire Protection Association
The authority on fire, electrical, and building safety
NFPA

DISCLAIMER

This seminar and its content is not a formal interpretation issued pursuant to NFPA regulations. Any opinion expressed is the personal opinion of the author and presenter and does not necessarily present the official position of the NFPA and its Technical Committees. Furthermore, this presentation is neither intended, nor should be relied upon, to provide professional consultation or services.

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Objectives

- Explain the requirements for combination fire and security systems per UL and NFPA standards
- Explain how licensing requirements could present a challenge when using combination systems
- Understand installation considerations and the use of manufacturer's instructions.

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NFPA 72 2019 Edition

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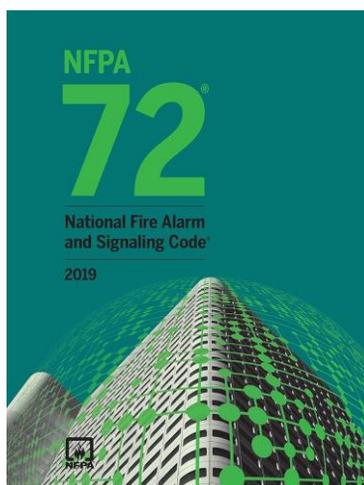
IBC 2021 Edition
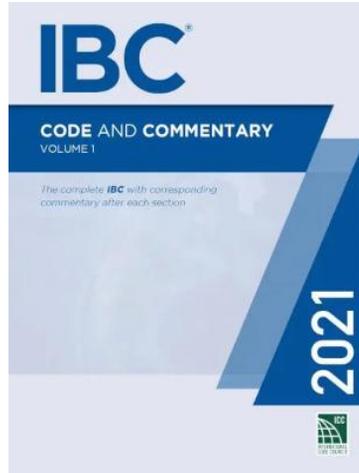
Fire Alarm System Documentation Requirements

IBC (2021) Requirements
- Section 907
  - 907.1.1 Construction Documents
  - 907.1.2 Fire Alarm Shop Drawings
  - 907.1.3 Equipment

Fire Alarm System Documentation Requirements

NFPA 72

- Chapter 10
  - 10.3.1 Equipment listings
  - 10.3.2 Required installation, ITM and maintenance ==per manufacturer's instructions==
  - 10.3.3 Compatibility listings

Combination Systems

Manufacturer's installation instructions

- Must follow all installation instructions
- Know panel specific requirements for installations

3.3.111.1 Combination System.
A fire alarm system in which components are used, in whole or in part, in common with a non-fire signaling system. (2019NFPA72)

Fire Alarm System Documentation Requirements

Alarm installation instructions

- Fire and security data lines must be run separately
- Some manufacturers require separate keypads for fire and security
- Additional modules may be required
- Most combination panels are 12V panels
- Most commercial notification devices are 24V
- Battery calculations and load shedding
- Know the equipment you are installing

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Fire Alarm System Documentation Requirements

Common Licensing considerations

- Are fire and security alarms covered by the same state agency?
- Which takes priority Fire or Security ?
- Do you need 2 licenses ?
- Local Requirements for licenses
- Local requirements for operational license or annual alarm permits

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Combination Systems

Popular Combination System Equipment

- Resideo Vista 32FBPT, also 128 and 250 point versions
- Bosch B9412, B8512G
- Napco Commercial Gemini

Combination Systems

Popular Combination System Equipment

- Resideo Vista 32FB, also 128 and 250 point versions

Combination Systems
Resideo Vista 32FB

Combination Systems

4297
V-Plex Polling Loop Driver and Isolator

- Adds additional polling loop current drive power for large installations
- Provides UL driven requirement to isolate burglary products from fire products
- Power via the control panel auxiliary 12V output

4193SN/4193SNP
V-Plex Two-Zone Expander

- Makes any hardwired device V-Plex ready
- Built-in serial number for addressing
- One supervised, one unsupervised zone

4208SN
V-Plex Eight-Zone Expander Module

- Dip-switch and serial number polling
- Supports up to 8 Class B zones

4209U
V-Plex Group Zoning Module

- 4-Zone, 2-Wire Smoke Detector Interface
- Streamlines large or expanded system installation

Combination Systems
Bosch B8512G
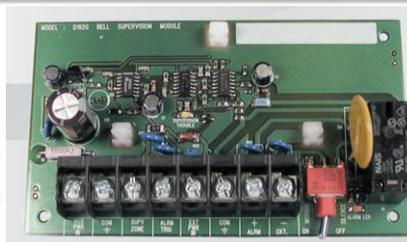
Control panels	Compatible modules	Compatible relays	See section:
Active Products:			
G-series (V3 and higher)[1] panels	D8128D	D130, D133, D134	*Wiring the module with G Series control panels, page 9*
B series panels[2]		D133, D134	*Wiring the module with B Series control panels, page 13*
Legacy Products[3]:			·
GV2 and G[3] panels*	See control panel documentation on Bosch website (http://www.boschsecurity.com)		
D9124*			
[1] G-series (V3 and higher) = GV4 (D9412GV4, D7412GV4, and D7212GV4**), and GV3 (D9412GV3, D7412GV3, and D7212G3**)			
[2] B series = B5512**, B4512** and B3512**			
[3] GV2 = D9412GV2, D7412GV2, and D7212GV2** and G = D9412G, D7412G, D7212G**			

Combination Systems
Napco Gemini C Series
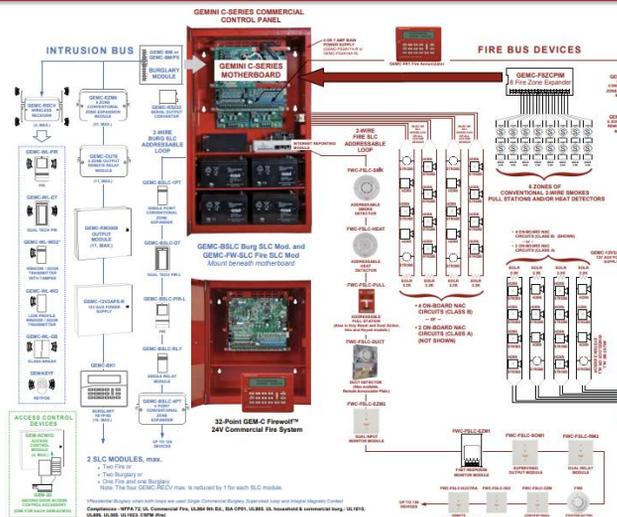
Fire Alarm System Documentation Requirements

Alarm installation instructions

- Most common locations are on the websites.

  MAY REQUIRE A LOGIN TO ACCESS

  - Resideo

    https://www.resideo.com/us/en/pro/resources/

  - Bosch

    https://commerce.boschsecurity.com/us/en/B9512G-control-Panels/p/F.

  - Napco

    https://tech.napcosecurity.com/index.php/index/login

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Questions

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