



CAL FIRE - OFFICE OF THE STATE FIRE MARSHAL

Information Bulletin 25-XXX

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Communication means for Fire Alarm systems

INTENT

The intent of this bulletin is to inform building owners, design professionals, contractors, inspectors, and Authorities Having Jurisdiction (AHJs) about the applicable requirements in National Fire Protection Association 72, 2022 edition regarding the use of Managed Facilities-Based Voice Networks (MFVNs) as an acceptable means of communication. A suggested checklist is provided in this bulletin to assist the user in ensuring a code compliant MFVN is installed. However, it is ultimately the responsibility of the AHJ to confirm that any additional and all code requirements have been met.

BACKGROUND

Traditional analog (or plain old telephone service—POTS) lines fall under the MFVN definition in NFPA 72. Many vendors claim to offer POTS replacement services that meet the MFVN requirements and guidelines of NFPA 72. This bulletin outlines some of the applicable requirements and guidelines that must be used. It also provides a suggested checklist to enable AHJs and other stakeholders to identify whether any POTS replacement service offered by a telecommunications carrier may qualify as an MFVN under NFPA 72.

SUMMARY AND GUIDE

It may be difficult for the designer and the authority having jurisdiction to determine whether the telephone service provider is providing the key features necessary for an MFVN. The telecommunications service provider should document that the MFVN service meets or exceeds these features.

NFPA 72 intends to only recognize the use of the means of transmission of alarm, supervisory, trouble, and other emergency signals through the use of qualified MFVNs.

The following checklist are suggested items to be provided for building owners, design professionals, contractors, inspectors, and AHJs to ensure code compliance. Compliance may include additional or fewer points, and is not limited to the items listed:

- The MFVN listed by a Nationally Recognized Testing Laboratory for use as a MFVN. [NFPA 72, 26.6.3.12, and 10.3.1]
- The MFVN is equivalent in function to a public switched telephone network (“PSTN”) associated with a traditional telecommunications carrier licensed by the state public



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utility commission and FCC to provide local exchange (i.e., dial tone) services and is considered part of the communication infrastructure, not the fire alarm system. [NFPA 72, 26.6.2.4.1, 3.3.309.2]

- Key question for premises owner: “Who is the carrier of record?”
- Note: The telecommunications carrier information can be found in one of the following:
 - FCC: <https://apps.fcc.gov/cgb/form499/499a.cfm>
 - CPUC: <https://apps.cpuc.ca.gov/apex/f?p=102:1>
- The MFVN provides a loop start telephone circuit interface. [NFPA 72, 26.6.4.2.1.2, A.3.3.168]
 - MFVN loop start telephone circuit tested according to the relevant Telcordia standards by an independent testing laboratory [NFPA 72, 3.3.309.1]
- *Pathway reliability is assured by proactive management, operation, and maintenance by the MFVN provider using each of the following:
 - The MFVN uses multiple technologies for back-end transmission for redundancy—wireline (where available) and wireless are provided
 - The MFVN can maintain a call when switching communication paths
 - The MFVN Carrier has disaster recovery plan available for review
- The MFVN has 8 hours of standby power supply capacity located at the protected premises or field deployed; and 24 hours of standby power supply capacity at the communications service provider’s central office. [NFPA 72, 26.6.3.13, A.3.3.168]
- *MFVN access safeguards are provided at the protected premises during installation to prevent unauthorized access.
 - (i.e., MFVN is in a locked telecom closet; Signage is provided identifying the communication pathways on the telecom punch down (66) terminal block, etc.)
- The MFVN is connected through a fully managed network by the telecommunications carrier [NFPA 72, 26.6.4.2.1, 3.3.168]
 - Carrier responsible for all traffic up to PSTN handoff point
 - Cannot be just hardware—needs a carrier to be responsible for management of network

*From 2022 NFPA 72 Annex Section A.3.3.168 and may not be explicitly required in the code.