

OFFICE OF THE FIRE CODE OFFICIAL
Collier County Fire Control & Rescue Districts
2800 North Horseshoe Drive
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COLLIER COUNTY

FIRE ALARM SYSTEM

SUBMITTAL GUIDELINES

(For Plan and Submittal Review)

Compiled by
Collier County Fire Marshal's Association
Fire Alarm Sub-Committee
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In order to expedite the plan review process, and to insure a code compliant design and installation of fire alarm system(s) being planned, the following requirements will be necessary for review:

Note: Systems shall be designed in accordance with the codes and standards adopted in Rule Chapter 69A-60 The Florida Fire Prevention Code, NFPA 1 (2006 edition) the Florida specific version, NFPA 101 (2006 edition) the Florida specific version, NFPA 72 (2002 edition) and the Collier County Fire and Protection Code Policy and Procedures Manual.

Fire Alarm System “Submittal Guidelines”

1. Provide minimum of **three (3) complete sets of plans**, drawn to scale (1/8” is preferred) including the appropriate Plan Checklist attached to each of the three sets of plans.
2. Provide **project name and address**.
3. Plans **must be bordered** (Title Block) by the contractor’s company information. The following information is required:
 - a. Name of installing company, address, city, state, zip code, phone number, fax number, contact person, license number and name of the local fire district/department.
4. Fire alarm **design shall comply with** the adopted codes as specified in the Rule Chapter 69A-60 The Florida Fire Prevention Code, specifically NFPA 1 - The Florida 2006 edition, NFPA 101 - The Florida 2006 edition, NFPA 72 (2002 edition) and the Collier County Fire and Protection Code Policy and Procedures Manual.
5. A **site plan shall be submitted** or the plans shall indicate the adjacent streets to identify the required exterior indicating device. Indicate that interior evacuation devices will be activated by operation of the sprinkler flow switches and/or any other suppression system (2002 edition of NFPA 72 section 6.8.5.6.1, 2007 Florida Building Code 903.4.2, 904.3.4 & 904.3.5)
6. **Complete Floor Plans** showing the location of all devices and appliance shall be provided. Plans shall include, but not limited to:
 - Appropriate Plan Checklist
 - Wiring diagram & wiring legend
 - Use of each room
 - Required Exits
 - Location of all new/existing devices
 - Heights of devices
 - Zoning legend (Non-addressable)
 - Ceiling construction

- Symbol list indicating make & model #'s
 - Candela rating of each visual device
 - Control of Protected Premises Fire Safety Functions
 - Circuit load calculations and the manufacturer's circuit parameters for the type of circuit
8. Provide the **maximum capacity in amps** (or watts for speaker circuits) **for each** notification appliance circuit and indicate the load or current draw of each circuit.
 9. Conductor types, sizes and number, and raceway sizes **shall be** indicated on the drawings.
 10. **Manufacturer's specification sheets** for all devices and appliances shall be provided including listed weatherproof exterior mounted devices and their back boxes.
 11. **Materials list** shall be provided indicating the materials used in the project **with quantities** of each device **and model numbers**. If multiple devices or equipment are shown on the individual catalog sheet, the unit used **shall be marked or highlighted conspicuously**.
 12. Provide detailed battery calculations for each "Battery Set". The manufacturer's format supplied in each control panel manual is the preferred format.
 13. **Signal circuit load and voltage drop calculations shall be** provided.
 14. The **Monitoring Company Information Form** (identified as **Appendix 1**) shall accompany the submittal for Monitoring-Only permits.
 15. **Contractor shall detail** the type of fire alarm system being installed with detailed **"Scope of Work Statement"**.
 16. **Provide details on the appropriate areas of the plans** showing mounting locations of detection devices and notification appliances, as well as details depicting the type of ceiling configuration (i.e., smooth, beamed, solid joists, sloped, shed, or peaked, etc.)
 17. **Provide the following details** for ACLF, Daycare, and Residential Board and Care Facilities: Type of Licensure, evacuation capabilities of clients and number of clients to be served.
 18. All systems must be specified as **"Power-Limited"** or **"Non Power-Limited"**.

19. Provide **Smoke Detection Design Documentation** which states the required performance objective of the system. (2002 edition of NFPA section 5.7.1.1)
20. Provide **Heat Detection Design Documentation** which states the required performance objective of the system. (2002 edition of NFPA section 5.6.1.1)
21. All fire alarm panels, power boosters, remote power supplies, devices, modules, dialers, surge suppressors, appliances, initiating devices, relays and any other components **shall be shown** on the floor plan and on the riser, and identified by their own unique identification number/symbol.
22. Each initiating device circuit, signaling line circuit and notification appliance circuit shall be shown on the riser and floor plan and identified/enumerated by respective circuit and sequential device/appliance number.
23. For **Upgrades, Additions, Augmentations, or any Modifications** to existing systems...show the capacity of the existing fire alarm control panel(s), the existing loads to all the existing circuits, whether the “new” modifications will impact existing circuits and if so...where, or whether existing spare circuits will be utilized and if so...which ones, whether additional power booster panels or expansion cards will be utilized to provide additional capacity, what the “new” load will be to the modified circuits and whether the existing batteries can handle the “new” loads, and finally what the available capacity will be for the “modified” panel and circuits following the completion of this scope of work.
24. **Designate on the drawings** all initiating device circuits, notification appliance circuits and signaling line circuits by class, or style, or both in accordance with NFPA 72 (2002 ed.) section 6.4.2.
25. **All dialers shall detail** the means of transmission to the receiving station.
26. Indicate on plans that “primary power” connections comply with NFPA 72 (2002 ed.) 4.4.1.4.1 through 4.4.1.4.4. **(i.e. dedicated branch circuit which is mechanically protected, circuit disconnect means marked in red – accessible to authorized personnel only – and identified as FIRE ALARM CIRCUIT, location of circuit disconnecting means identified at FACU, and overcurrent protection provided.)** {NOTE: This shall include air conditioning units (such as “window-shakers” or the self-contained units in the NEMA Type IV enclosures) specifically installed to supply artificial conditioning to the space occupied by the FACU in order for FACU to meet the operating parameters of 4.4.4.1}
27. Indicate on plans how the secondary power supply for this protected premises fire alarm system complies with the applicable requirements of NFPA 72 (2002 ed.) 4.4.1.5.

28. Provide a written statement with the submittals indicating that the wiring calculation (load & voltage drop) and the battery calculations are accurate and adequate.
29. **Show location of all required surge protectors** per {NFPA 70 (2005 ed.) Articles 760.11 & 800 and NFPA 72 (2002 ed.) section 4.4.4.3} and indicate the type of device and what it protects (120VAC, 24V/Data, telephone lines).
30. Provide **“point to point” wiring on the floor plan delineating** the wiring of all connections to devices, appliances, components, etc.