



BUILDING & ZONING DIVISION

MINIMUM PLAN REQUIREMENTS FOR FIRE ALARM SYSTEMS

City of Sarasota
Building & Zoning

1565 1st Street
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Sarasota, FL 34230

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PLEASE NOTE: Systems **must be designed** in accordance with the codes adopted in State Fire Marshall Rule 4A-3 and specifically, NFPA 101 (2006), NFPA 72 (2002), Local codes and ordinances and AHJ. Systems that do not meet all of these requirements and specifications shall not be issued a permit.

Please provide the following information:

- I. One (1) copy of the application completely filled out and signed by the contractor. Note that a Fire Alarm System may be part of an overall application for permit. If the system is part of an overall application for a permit, please make sure that your application packet has AT LEAST the following.**
- II. Include a site plan drawn to scale, illustrating:**
 1. The distance from structure to rear, front and side property lines.
 2. An arrow indicating North.
 3. The name(s) of adjacent street(s).
 4. Identification and location of the exterior indicating device(s). Please indicate that interior evacuation devices will be activated by operation of the sprinkler flow switches and/or any other suppression system.
- III. You must include four (4) copies of the plans including the following information:**
 - A. **IF THE VALUE OF THE FIRE ALARM SYSTEM JOB EXCEEDS FIVE THOUSAND DOLLARS (\$5,000.00)**, a Florida Registered Professional Engineer must seal shop drawings per 2007 FBC 105.3.1.2 and s. 471.025 FS); each sheet of plans and prints which must be sealed under provision of Chapter 471 FS shall be sealed, signed and dated by the professional engineer in charge in accordance with Rule 61G15-23.002(2) FAC.
 - B. Plans must include the **PROJECT NAME AND ADDRESS**
 - C. Plans must be bordered (Title Block) by **THE CONTRACTOR'S COMPANY INFORMATION**. This block must include the name of the installing company, address, city, state, Zip code, phone number, fax number, contact person's name, the State of Florida Certification or Registration Number and the City of Sarasota license number (if applicable).
 - D. Complete floor plans must show the location of all devices. Please include **AT LEAST** the following:

✓ Wiring diagram and wiring legend	✓ Zoning legend (non-addressable)
✓ Use of each room	✓ Symbol list indicating make and model numbers
✓ Required exits	✓ Candela rating of each visual device
✓ Location of all new AND existing devices	✓ Circuit load calculations
✓ Height of each device	
 - E. **CONDUCTOR TYPES, SIZES AND NUMBER, AND RACEWAY SIZES** shall be indicated on the drawings.
 - F. Provide details on plans showing **ELEVATION OF SMOKE DETECTORS, TYPE OF CEILING** (i.e., smooth, beamed, solid joists, sloped, shed or peaked). Note: If ceilings are beamed, show beam depth, spacing and ratio of beam depth to ceiling height. Note: Additional consideration shall be given to meeting the 0.7 ruling or detector layout.
 - G. All fire alarm panels, power boosters, remote power supplies, devices, modules, dialers, components, appliances, initiating devices, and relays must be shown on the floor plan and on the riser, **AND IDENTIFIED BY THEIR OWN UNIQUE IDENTIFICATION NUMBER AND/OR SYMBOL.**

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III (cont). Plans must also include the following:

- H. For each **INITIATING DEVICE CIRCUIT, SIGNALING LINE CIRCUIT** and **NOTIFICATION APPLIANCES CIRCUIT**:
1. Each must be shown on the riser.
 2. Each **MUST BE DESIGNATED ON THE DRAWINGS BY CLASS, BY STYLE OR BOTH** in accordance with NFPA 72 (2002 ed.) section 6.4.
 3. Provide the maximum capacity in amps (or watts for speaker circuits) for each notification appliance circuit and indicate the load or current draw for each circuit.
 4. Signal circuit load and voltage drop calculations shall be provided.
 5. Provide the maximum number of initiating devices for each initiating device circuit or signaling line circuit and indicate the specific number and type of each device.
- I. Indicate on plans that "**PRIMARY POWER**" connections comply (dedicated circuit, separate locked, labeled disconnect with means for protecting circuit) and provide secondary power (NFPA 72 (2002 ed) 4.4.1.5). This must include air conditioning units supplying the required conditioned air for a fire alarm system panel.
- J. Show location of all required surge protectors per NFPA 70 Article 760-7/800 and indicate the type of device (120VAC/24V/Data). This shall include copper telephone lines used for monitored fire alarm systems.
- K. Provide a "point to point" wiring diagram showing the wiring of all connections and devices.
- L. Provide the maximum capacity in amps (or watts for speaker circuits) for each notification appliance circuit and indicate the load or current draw for each circuit.

IV. Manufacturer's specification sheets for all devices must be provided including listed weatherproof exterior mounted devices and their back boxes

V. Material list must be provided indicating the materials used in the project with quantities of each devices and model numbers. If multiple devices or equipment are shown on the individual catalog sheet, the unit used must be marked or highlighted conspicuously.

VI. Provide detailed battery calculations for each "Battery Set". The manufacturer's format supplied in each control panel manual is the preferred format.

VII. The contractor must detail the type of fire alarm system being installed with "Scope of Work Statement", i.e., local F/A only, local w/remote monitoring included, local w/DACT only programming by others, etc.

VIII. 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.

IX. For upgrades or additions to existing systems show the capacity of the system and all modified circuits, the existing load or current draw of each circuit or component, the capacity available and the additional load of the added devices or circuits.

X. All dialers shall detail the means of transmission to the receiving stations.

XI. Provide a written statement with the submittals indicating that the wiring calculation (load and voltage drop) and the battery calculations are accurate and adequate.

XII. Fire Alarm design SHALL COMPLY WITH THE ADOPTED CODES as specified in State Fire Marshall Rule 4A-3, Florida Building Code Chapters 9 and 11, and any local codes and ordinances that may apply.