NORTH COLLIER FIRE CONTROL AND RESCUE DISTRICT
PREVENTION BUREAU
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Fire Alarm 61G Checklist

This information is provided to assist designers in preparing for the fire alarm 61G review. If you have any questions, please contact pdemeo@northcollierfire.com.

Fire alarm system is less than $5000, the Engineer of Record shall provide the minimum design detail.

A statement on the plan is acceptable to the AHJ. Please see the following example: This is a (new / existing) (addressable / conventional) (complete fire alarm system / dedicated function fire alarm system -sprinkler monitoring only / fire alarm releasing panel etc.) with a job value less than $5,000.

If this is an existing system include a brief description of the modification (example: adding 3 strobe only devices and relocating 4 horn strobes in unit 101).

If there are multiple permits for work on the same fire alarm system by the same contractor, the job value is based on all fire alarm work combined.

For fire alarm systems greater than $5000, provide the State required Engineering documents in compliance with the Florida Administrative Code for "Design of Fire Alarms and Detection Systems". Plans are required to be signed and sealed. FAC 61G15-32.003 and .008; 61G15-33.006 FBC 5th ed. 105.3.1.2 (4). Provide complete information required by Florida Administrative Code 61G15-32.008 (1)-(7).

- ☐ Plans shall be signed and sealed by an engineer.
- ☐ Identify the applicable code conformance to reflect the minimum Fire and Life Safety Code adopted by the State of Florida (Florida Fire Prevention Code, 5th ed.), NFPA 72 (2010) and NFPA 70 (2011).
- ☐ Provide a site plan of the immediate area around the protected building, structure or equipment when alarm devices are required outside the structure.
- ☐ Identify the occupancy classification and load per the Florida Fire Prevention Code, 5th edition.
    - Free online access to the Florida Fire Prevention Code can be found at http://www.myfloridacfo.com/Division/SFM/BFP/FloridaFirePreventionCodePage.htm
- ☐ Indicate whether the fire alarm is conventional or addressable, and indicate all zoning. Identify the type of fire alarm system to be installed (Completed Fire Alarm with or without smoke detection. Dedicated function fire alarm system and type, Releasing fire alarm system, etc.).

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- ☐ Identify the functions required by the alarm and control systems including the transmission of emergency signals being monitored or annunciated. NOTE: Collier County does not require central station.
- ☐ The system design must indicate if the system is to provide a general evacuation signal or a zoned evacuation for all high-rise buildings or multi-tenanted properties
- ☐ Requirements for operations and maintenance procedures, manuals, system documentation, and instruction of Owner's operating personnel, as needed to operate the systems as intended over time.
- ☐ System test requirements shall be noted on the Engineering Design Documents.
- ☐ Identify the Class and Survivability of circuits as listed in the NFPA 72.
- ☐ Wiring requirements for underground, wet locations, campus style wiring, protection against damage and burial depth shall be specified or indicated on the engineering design documents.
- ☐ Surge suppression required on the 120 volt circuit and any outside wiring. Show on both riser diagram and floor plan in their proposed locations and ensure location is within the listing parameters of the devices.
- ☐ Locate system devices that are subject to environmental factors, and indicate requirements for the protection of equipment from temperature, humidity or corrosive atmospheres, including coastal salt air.
- ☐ Strobe intensity and speaker output ratings for all notification devices.
- ☐ Plans shall be clear, with a symbols legend, system riser diagram showing all initiation and notification components, and cabling requirements. Indicate locations where fire ratings are required as determined by the system's survivability requirements. Identify the general occupancy of the protected property and for each room and area unless it is clear from features shown.
- ☐ Locate initiation and notification devices and connections to related systems on the floor plans and sections when needed for clarity. Related systems include elevator controls smoke control systems, dampers, and doors.
- ☐ In buildings were smoke detection will be obstructed or under a pitched roof (see additional requirements). 61G15-32.008 (4) (j).
- ☐ Where smoke stratification is anticipated (see additional requirements). 61G15-32.008 (4) (k)
- ☐ Systems designed using Performance Based (see additional requirements). 61G15-32.008 (4) (l)
- ☐ If any of the 61G requirements do not apply acknowledge with the requirement and N/A.

- In the event that the Engineer of Record elects to specify specific equipment and to show the required wiring, battery and voltage drop (circuit analysis) calculations shall be completed. The calculations shall be completed using the equipment manufacture's data and applicable NFPA 72 procedures.
    - Existing fire alarm system the specific information about the fire alarm system is known. The information above cannot be deferred to the shop drawings as the engineer must determine if the existing fire alarm system is capable of handling the additional devices being added.
- When the engineer determines that special requirements are required by the owner, insurance underwriter or local fire code amendments these requirements shall be documented or referenced on the Engineering Design Documents.
    - Anything above and beyond the minimum code shall be specifically noted on the plans and who is requiring this to be added to the system (example: only a single manual pull station is required by code, the owner is requiring a manual pull station at each exit).
    - Note on plans
        - AHJ Requirements:
            - An exterior weatherproof audio visual device is required per Collier County Fire Prevention and Protection Code Policy and Procedure Article FAL 01-1. www.ccfdin.com
            - Duct smoke detectors that are not part of a smoke-control system and used solely for closing dampers for HVAC systems shall not activate the building evacuation alarm. Instead, they shall initiate a supervisory signal only. Collier County Fire Prevention and Protection Code Policy and Procedure Article FAL 02-2 www.ccfdin.com
            - All aboveground valves or PIV's that control water exclusively supplying a fire sprinkler system shall be electrically monitored. Collier County Fire Prevention and Protection Code Policy and Procedure Article number COD 00-1. www.ccfdin.com
- North Collier Fire AHJ Requirements:
    - A building with a dedicated function fire sprinkler monitoring system: the pull station should be located on the exterior of the building below the weatherproof A/V in an area that is accessible to occupants of the building.

- A building with a fire alarm system where only 1 manual pull station is required: the pull station should be located in the interior or the building within 5' of the main entrance/exit.

- Sleeping rooms require a sound level of at least 75 dBA at the pillow level and to have a low frequency square wave or equivalent 520 HZ +/- 10%. NFPA 72 (2010) 18.4.5.1 - 18.4.5.3
- Voice evacuation system designers must determine the voice intelligibility during the planning and design phase. Each acoustically distinguishable space (ADS) shall be identified as requiring or not requiring voice intelligibility (A chart template is provided below that you may use).

VOICE EVACUATION ACOUSTICALLY DISTINGUISHABLE SPACES (ADS)
NFPA 72 requires system designers to determine the voice intelligibility during the planning and design phase. Each ADS shall be identified as requiring or not requiring voice intelligibility. NFPA 72 (2010) 18.4.10-18.4.10.3.

Intelligibility shall not be required in the following locations:(1) Private bathrooms, shower rooms, saunas and similar rooms/areas (2) Mechanical/electrical/elevator equipment rooms (3) Elevator cars (4) Individual offices (5) Kitchens (6) Storage rooms (7) Closets (8) Rooms/areas where intelligibility cannot reasonably be predicted.

*NOTE: You are not required to use this template. If you want to use a different format that provides all of the information you may.

Template:

ACOUSTICALLY DISTINGUISHABLE SPACES

ROOM #	USE/NAME	AVG AMB SPL	60 SEC SPL	PROVIDED SPL IN ALARM	ADS INTELL
101	LOBBY	55	0	70+	YES
STAIR #1	STAIR	N/A	N/A	N/A	N/A

Identify voice intelligibility in accordance with NFPA 72 (2010) 18.4.10-18.4.10.3.

*ADS – ACOUSTUCALLY DISTINGUISHALBE SPACES
* SPL – SOUND PRESSURE LEVEL

Example:

FIRE ALARM SCHEDULE					
ROOM NUMBER	ROOM NAME	AVERAGE AMBIENT SOUND PRESSURE LEVEL (DB)	60 SECOND SOUND PRESSURE LEVEL (DB)	PROVIDED SPL	ADS INTELLIGIBILITY
SC100	LOBBY	50 dB	N/A	70 dB	YES
SC102	RECEPTION	45 dB	N/A	70 dB	YES
S-1	STAIR #1	40 dB	N/A	70 dB	YES
SC112	CORRIDOR	50 dB	N/A	70 dB	YES
E-1	ELEVATOR	40 dB	N/A	70 dB	YES
SC103	ADMISSIONS	50 dB	N/A	70 dB	YES
SC104	OFFICE	55 dB	60 dB	N/A	YES
SC105	OFFICE	55 dB	60 dB	N/A	YES
SC106	OFFICE	55 dB	60 dB	N/A	YES
SC107	OFFICE	55 dB	60 dB	N/A	YES
SC108	TABLE STORAGE	40 dB	50 dB	N/A	YES
SC109	WORKROOM	55 dB	N/A	70 dB	YES
SC110	WOMEN'S ROOM	50 dB	N/A	70 dB	YES
SC111	ELEV EQUIP CLOSET	40 dB	N/A	70 dB	YES
SC101	I.T.CLOSET	40 dB	N/A	N/A	N/A
SC113	MEN'S ROOM	50 dB	N/A	70 dB	YES
S-2	STAIR #2	N/A	N/A	N/A	N/A
SC114	JANITOR'S CLOSET	N/A	N/A	N/A	N/A
SC115	TOILET	45 dB	N/A	70 dB	YES
SC116	DRY STORAGE	N/A	N/A	N/A	N/A
SC117	COOLER	N/A	N/A	N/A	N/A
SC116	FREEZER	N/A	N/A	N/A	N/A
SC118	KITCHEN	70 dB	N/A	96 dB	YES
SC119	OFFICE	55 dB	N/A	70 dB	YES
SC120	MECHANICAL	N/A	N/A	N/A	N/A
SC123	ELECTRICAL	N/A	N/A	N/A	N/A
SC121	SERVING	70 dB	N/A	96 dB	YES
SC112	CORRIDOR	50 dB	N/A	70 dB	YES
SC122	STUDENT BISTRO	80 dB	N/A	96 dB	YES
S-3	STAIR #3	N/A	N/A	N/A	N/A

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