

FIRE ALARM SUBMITTAL GUIDELINES

SITE PLAN SHEET, To Include:

- A plan of the entire site with all buildings at an appropriate scale (1" = 30' or 40')
- Indicate the area of work if not a new site.
- Note the building names or designations for all buildings.
- Show the location of the FACP, all Power Boosters, Terminal Cabinets and any Remote Annunciator Panels.
- Show the conduit runs connecting the panels and buildings, specify the wire type and size.

FLOOR PLAN SHEET(S), To include:

- Floor plan of every building and every floor within the scope of the work.
- Scale shall be shown as a minimum of 1/8".
- Label all rooms as to their use within space of floor plan.
- Show all door swings and all partition walls.
- Show the location of all fire alarm devices and panels (*new and existing*).
- Show the candela rating of each visual device adjacent to device on the floor plan.
- Show the circuit and device number adjacent to each device (*both initiating and annunciating circuits*) in the sequence intended to be wired per the riser diagram.
- Show the location of the EOL for each specific circuit, to match riser diagram.

FIRE ALARM DETAILS & CALCULATION SHEET(S), To include:

SYSTEM DESCRIPTION:

- Type of system is either Required/Non-Required, Manual or Automatic.
- Addressable or Non-Addressable system.
- Class A or B.

GENERAL NOTES:

- Final Fire Alarm test will be witnessed by a designee of the Fire Marshal.
- Underground and exterior conduits will have water-tight fittings.
- Fire Alarm Devices Mounting Heights:
 - Pull Station: 48" to center line of device above finished floor.
 - Interior Horn: 90" to top of device above finished floor, not less than 6" from ceiling.
 - Wall mounted Strobe or Horn Strobe: 80" to bottom of device and not greater than 96" above finished floor, not less than 6" from ceiling. Ceiling mounted strobes per their listing.
- Audible device(s) shall be at least 15 dBA above average ambient sound level but not less than 75 dBA at 10' or more than 110 dBA in total, throughout!
- Visual devices shall not exceed 2 flashes per second and shall not be slower than 1 flash every second. Synchronization of strobes is required.

SEQUENCE OF OPERATION:

- Provide a sequence of operation matrix table.

SYMBOL LEGEND:

- Plans and shop drawing shall use the symbols identified in NFPA 170.
- Provide a wire schedule noting size wire for indicating and annunciating circuits.

EQUIPMENT LIST:

- Indicate the make and model of each fire alarm device or component.
- Indicate the SFM listing number, and provide current SFM Listing sheets for devices.
- Provide cut sheets for devices.

RISER DIAGRAM:

- Show all panels and circuits in straight line format in the sequence intended.
- Indicate the name of the building for each circuit shown, and by floor.
- Identify the EOL resistor for each circuit required.
- Specify the designated 120 volt circuit for connection to FACP and/or power booster.

WIRING DIAGRAMS:

- Provide diagrams for wiring connections for all devices in the system.
- Provide a diagram for wiring connection between FACP and/or power boosters.

CALCULATIONS:

- Provide a separate battery calculation for the FACP and any power boosters. Note the required load and size of battery provided. For alteration projects, differentiate between new and existing load and the total load required for the entire system.
- Provide voltage drop calculations for each indicating circuit. Voltage drops should not exceed 10% maximum unless specific documentation from manufacturers is provided to show that devices can operate at the range calculated.

SCOPE OF FIRE ALARM WORK & MISCELLANEOUS INFORMATION:

- Provide a brief description of the scope and extent of fire alarm work involved. If performing a complete replacement, please state so. If doing alteration, or additions, briefly state the extent of alterations and/or additions.
- All information is required to be shown on the drawings. Exception: data cuts sheets and listings, which may be submitted in booklet form.
- Clearly differentiate between new and existing conditions and devices.
- Plans shall be signed by Engineer of Record (EOR) or installing C-10 Licensed Contractor.