

FORT BEND COUNTY FIRE MARSHAL'S OFFICE

FIRE ALARM SYSTEMS

These submittal requirements are to be followed when a business, facility or organization proposes to install or modify a fire alarm system, within Fort Bend County.

SUBMITTAL REQUIREMENTS

- 1. An original (Wet) APS signature and stamp, as required by TIC Chapter 6002, Section 34.619, or signed and sealed by a registered Fire Protection Engineer (PE), is required on all plan drawings and calculations.
- 2. Plans shall be designed and will be reviewed based on the requirements in the International Fire Code, 2012 Edition and NFPA 72, 2016 Edition or most recent edition, and shall be indicated on the plan drawings as the code and standard of record.
- 3. Plans shall be clear, legible and in a common and appropriate scale.
- 4. Indicate all walls and rooms. Ceiling tiles shall not be shown unless needed for clarity.
- 5. Scope of Work.
- 6. Sequence of Operations.
- 7. Equipment List.
- 8. A minimum of two (2) sets of plans shall be submitted. Plans shall contain sufficient detail to enable the
 - a. Reviewer to accomplish a complete review. The following information shall be provided on the plans;
 - b. Project Name & Address
 - c. Title Block
 - d. North arrow
 - e. Floor plan
 - f. Building Permit number
 - g. Device location
 - h. Site map
 - i. Type of device
 - j. Provide a "point-to-point" wiring configuration
 - k. Fire alarm control panel
 - I. Annunciators
 - m. Location of doors
 - n. Intended use of each room
 - o. Location of all air handling units
 - p. Show location of all fire sprinkler risers, flow switches, tamper switches and fire pumps (if equipped)
 - q. Notification devices shall indicate candela rating
 - r. Heat detectors shall indicate temperature rating
- 9. Point ID/Addressable device list shall indicate how the devices will report to the Central Station (CSM).
- 10. Specification booklet shall contain the following;
 - a. A minimum of one (1) set of data specifications sheets for all devices and equipment
 - b. Listing of the system design, operation and reset functions
 - c. Specific devices or materials used are to be identified by an arrow or highlighter
 - d. Battery discharge curves

- e. Wire specifications
- Type of primary power and secondary power (i.e. size and number of batteries to be provided)
- 11. Device mounting height diagrams.
- 12. Voltage drop calculations.
- 13. Battery calculations to include Standby and Alarm.
- 14. The notes shall clearly indicate that the initiating circuit wiring shall be Class A.
- 15. Indicate source of primary and secondary power.
- 16. Identification of the type of conduit used, if any.
- 17. Identification on the gauge and type of wire used.
- 18. Device address numbers provided for addressable/analog intelligent systems.
- 19. The use of each room is identified on the plans.
- 20. The title block shall contain the following:
 - a. Location of the installation
 - b. Name and complete address of the business
 - c. Name and complete address of the installing company
 - d. Licensing information
 - e. "Wet" signature of the APS
 - f. Date issued and any revisions
 - g. Drawn by
 - h. Authority Having Jurisdiction
- 21. Provide a Riser diagram to include the following;
 - a. All devices as they are shown on the plans, as wired
 - b. 120 VAC
 - c. Surge suppressor
 - d. Communications method to the CSM
- 22. A legend shall be provided to include;
 - a. Total number and type of all devices shown on plans
 - b. Symbol, device description, manufacturer, model number, and quantity for each device
 - c. All symbols shall comply with NFPA 170

OPERATIONAL REQUIREMENTS

1. All fire alarm systems shall meet all current NFPA 72 guidelines.

PERMIT REQUIREMENTS

- 1. A completed Fort Bend County FMO Permit application form and the appropriate fees.
- 2. FMO approval for submitted design drawings and spec sheets.
- 3. A full equipment listing.
- 4. Manufacturer documentation for all parts and materials used in the project.
- 5. Drawings shall be submitted for review and approved, PRIOR to installation.
- 6. Plans approved by the Fire Marshal's Office give authorization for installation. Final approvals are subject to field verification. Any approval issued by the Fire Marshal's Office does not release the contractor or property owner from the responsibility of full compliance with all applicable codes and ordinances.
- 7. All Fire Marshal inspection forms and permits shall be kept in a permit packet on the job site until final inspection.
- 8. All installations shall comply with the approved plans. Any deviation from the approved plans requires a resubmittal to the Fire Marshal's Office.

No equipment shall be installed on the site until a Permit has been issued. Any work performed prior to the issuance of the correct permit may result in a citation being issued for violation of Section 113.3 of the 2012 International Fire Code.