

PORT ARTHUR FIRE DEPARTMENT

FIRE PREVENTION DIVISION

FIRE SPRINKLER SYSTEMS – DOCUMENTATION AND PLAN SUBMITTAL 9-1-2017

The following guidelines are to be followed when a fire sprinkler system is installed or modified within the City of Port Arthur. These guidelines are not to be interpreted as containing all data required for proper design, installation, or approval. Complete details for the design and installation of fire sprinkler systems are found in the referenced standards.

IF YOU ARE A GENERAL CONTRACTOR OR PLUMBER AND ARE NOT AUTHORIZED BY THE TEXAS DEPARTMENT OF INSURANCE TO COMPLETE A CONTRACTOR'S MATERIAL AND TEST CERTIFICATION FOR UNDERGROUND PIPING, (OR DON'T KNOW WHAT ONE IS), YOU SHOULD CONTACT A REGISTERED SPRINKLER SYSTEM INSTALLER BEFORE PERFORMING ANY WORK ON AN UNDERGROUND SPRINKLER SUPPLY LINE.

- All fire sprinkler systems hereafter installed or modified shall conform to the following:
 - 2015 International Building Code
 - 2015 International Fire Code, as amended and adopted by the City of Port Arthur
 - NFPA 13, 13R, or 13D as applicable, 2013 edition.
 - Texas Insurance Code chapter 6003 and Texas Administrative Code: Fire Alarm Rules

General Requirements

- Fire Department connections shall be a single, 5" Storz connection unless otherwise approved.
- Fire Department connections are to be located at the front or main entrance side of buildings unless Fire Department apparatus approach is otherwise. Fire Department connections at locations other than the front of a building shall require approval of the Fire Marshal.
- All valves are to be labeled as to their purpose.

Completion and System Documentation

- Texas Department of Insurance Contractor's Material and Test Certification for Underground Piping.
- Texas Department of Insurance Contractor's Material and Test Certification for Aboveground Piping.

Inspection & Testing Requirements

The following tests and inspections are required for new installations or modifications involving over 20 sprinkler heads of an existing system.

- Contact the Fire Marshal's Office at least 24 hours prior to testing to be placed on the Department's calendar.
- Joints are to be exposed during underground hydrostatic tests. Back filling is allowed between joints before testing.
- Above ground hydrostatic tests are to be conducted prior to ceiling and wall covering installation to allow visual inspection of piping.
- Water flow, main drain valve, and control valve tests are to be conducted and observed in accordance with NFPA 13 & NFPA 25.
- A representative from all fire protection systems interconnected with the alarm system must be present at the time of the acceptance testing, unless these components have previously been tested. (sprinkler, vent hood extinguishing, etc.)

Plan Submittal Requirements

- Plans shall be clear and legible and all sheets shall be in a common and appropriate scale (preferably computer generated). A minimum of two (2) sets of plans and minimum of one (1) set of specifications/cut

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sheets shall be submitted. Plans shall contain sufficient detail to enable the plan reviewer to accomplish a complete review. Plans that do not conform to the submittal requirements and/or are not clearly legible will be rejected and require a re-submittal.

- Sprinkler system plans must contain all information as specified in Texas Insurance Code chapter 6003 and Texas Administrative Code: Fire Alarm Rules
- Each submittal shall have a:
 - Completed City of Port Arthur Fire Protection Permit Application
 - State of Texas license number for RME and registration number of registered firm
- The following information shall be provided on the plans:
 - “Wet” RME or PE signature and stamp.
 - A. H. J. as the City of Port Arthur.
 - Designed in accordance with the 2015 International Fire Code and specific edition of applicable NFPA codes. Simply stating, “conforms to applicable codes” will not be accepted.
 - Title block that contains the following:
 - Business name & address of installation
 - Installing company’s name, address, and phone #
 - Licensing information
 - Date Drawn / Drawn by
 - State of Texas license number for RME and registration number of registered firm
 - A legend that contains the following: Symbols, descriptions, manufacturer, model number, and quantity for all devices shown on plans
 - Floor plan with intended use or description of each room/space
 - Hazard classification per NFPA 13
 - Elevation diagram
 - Square footage and scale of diagram or measurements of building
 - Location of doors
 - Show location of underground piping, all fire sprinkler risers, flow switches, tamper switches, and fire pumps (if equipped)
 - Plans should clearly identify the location of devices in second stories or attic spaces. This may be best accomplished by a separate page for these locations.
- Specification booklet shall contain the following:
 - Scope of Work if not on floor plan.
 - Data specifications sheets for all devices and equipment
 - Listing of the system design, operation, and rest functions
 - Specific materials in the specification booklet are to be identified by an arrow or highlighter
 - Equipment List