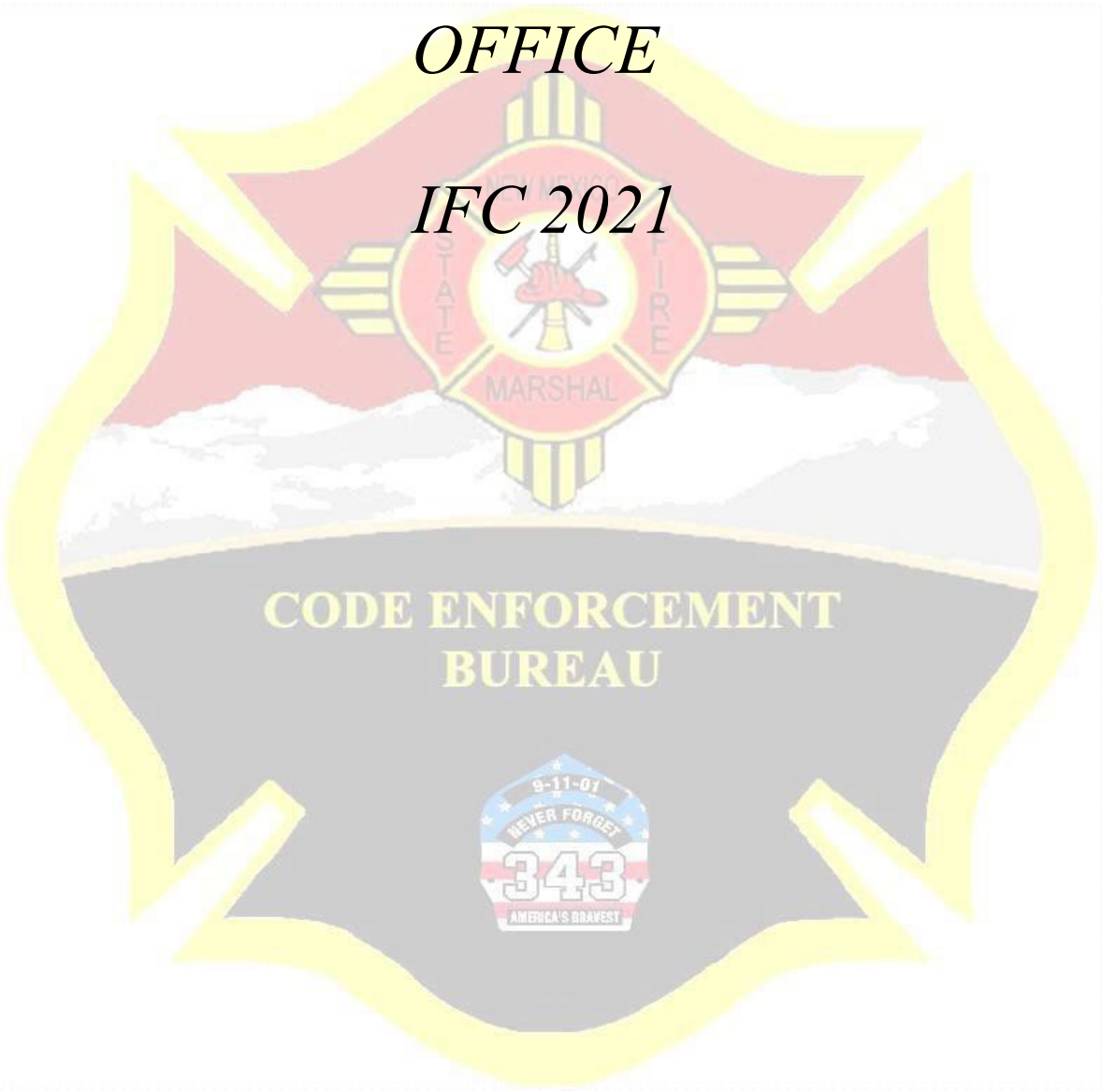
Department of Homeland Security & Emergency Management

NEW MEXICO

STATE FIRE MARSHAL'S

OFFICE

IFC 2021



FIRE CODE ENFORCEMENT BUREAU

PLAN SUBMITTAL INFORMATION

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General Information

All applicants providing submittal of plans for any fire protection system shall possess a valid Certificate of Fitness from the New Mexico State Fire Marshal's Office (SFMO) in accordance with **NMAC 10.25.2.** A copy of the Certificate of Fitness shall be present on any job site where any installation, inspection, or maintenance of a fire protection system is being conducted. The original shall be placed in a conspicuous location at the main office.

If your company does not possess a valid Certificate of Fitness, you may contact the New Mexico State Fire Marshal's Office at (505) 476-0080 or online at www.nmdhsem.org to obtain an application form. If you are aware of a company performing work without a Certificate of Fitness, please report this to our office.

A valid Certificate of Fitness, along with the original signed and approved plans or Scope of Work letter shall be on-site whenever any installation, modification or alterations are being conducted on fire protection systems.

Scope of Work Letter

Applicants may submit a Scope of Work Letter to be reviewed and approved by a State Fire Inspector, Deputy Fire Marshal of Code Enforcement, or the State Fire Marshal. The intent of a Scope of Work Letter is to allow for fire protection systems to be modified or altered when only minor changes are to be made, which do not cause a significant change to the originally approved design. Many factors are considered prior to approving the acceptance of a Scope of Work Letter. Customarily, alterations to fire protection systems with 10 or less appliances, or a fire sprinkler system with 19 heads or less, may be eligible to obtain a Scope of Work Letter.

A NM Licensed PE stamp is not required. Documented findings of review and analysis of the system, with requested alterations, shall be conducted and certified by a minimum of a NICET Level III for the respective system (excluding wet chemical extinguishing systems).

A Scope of Work Letter shall be submitted, on company letterhead, with the following information:

1. Date submitted
2. Complete name of the building and/or Project
3. Complete physical address, to include city, county, state and zip code of job site.
4. Occupancy Classification per IFC 2021.
5. Occupant load of building or specific areas.
6. Square footage of each fire area(s).
7. Name of Fire Protection Installer with full address and telephone number.
8. Fire Protection Installer Point of Contact name, title, direct telephone number, and email address.
9. The NICET certified party name, certification number, expiration date of certification, and signed initials shall be on the plans.
10. All manufacturer specification sheets.
11. Scope of Work and applicable notes.
12. Number of devices or appliances to be altered, installed, or relocated.
13. An area designated to sign upon approval shall be provided. This area shall include a line for the date, title, printed name, and signature from this office.

Electronically Submitted Plans

Electronically submitted plans shall contain all the necessary information in the ***Plan Submittal Requirement*** section of this document, and the following:

- ✓ Only one electronic copy may be submitted per email.
- ✓ Electronic files shall be e-mailed to sfmo.plans@dhsem.nm.gov
- ✓ Subject of email shall be the Project Name, County, City and indication of fire protection system to be tested. Example is as follows:
  - John Doe Elementary, San Miguel, Las Vegas, Fire Alarm
  - Jane Doe Senior Center, McKinley, Gallup, Fire Sprinkler
- ✓ The electronic file shall be named as follows: Project name, Revision, Date submitted, and initials of fire protection system. Examples are as follows:
  - John Doe Elementary, Initial, 09.02.2019, FA (fire alarm)
  - John Doe Elementary, Revision 3, 11.12.2019, FA
  - Jane Doe Senior Center, Revision, 08.01.2019, FS (fire sprinkler)
- ✓ Plans are reviewed on a first come, first serve basis. Plans are either stamped as APPROVED, APPROVED WITH EXCEPTIONS, or REJECTED. If plans do not contain the required information (please see Plan Submittal Requirements), they will be rejected. Plans customarily do not take in excess of 15 business days to review, however, there may be delays due to increased plan submittals.
- ✓ Installation, modifications, or alterations to a fire protection system shall not begin until such time that the plans have been stamped as reviewed and approved by the NM SFMO.
- ✓ Upon approval, an electronic copy will be emailed to the address provided.

Final Acceptance Process (Simplified)

- ✓ A minimum of 2 color copies of the plans, along with the acceptance letter, shall be printed and available at time of Final Acceptance.
- ✓ Once fire protection systems have been installed in accordance with the plans, a full pre-test shall be conducted in accordance with NFPA standards. If failures exist, the system(s) shall be corrected and pre-tested until such time that they pass successfully. Note: If there are multiple fire protection systems, all shall be pre-tested and function properly and in accordance with all applicable laws, codes, and standards.
- ✓ If a phased project, or a project with numerous fire protection systems, all representatives shall be contacted and verified by the superintendent, general contractor, or project manager to ensure all systems have been properly tested, pass, and are ready to schedule a Final Acceptance Test.
- ✓ Complete ***Final Acceptance Checklist*** and e-mail to sfmo.inspections@dhsem.nm.gov
- ✓ A State Fire Inspector(s) will then be dispatched to conduct a Final Acceptance Test at a determined date and time. Approved/stamped plans, manufacturer specifications, testing documentation, and a representative from each system to be tested shall be on site.

Plan Submittal Requirements

The New Mexico State Fire Marshal's Office has adopted the **International Fire Code, 2021 Edition**, as of November 1st 2022. Which requires the submittal of construction documents for all fire protection systems within the jurisdiction of the State Fire Marshal's Office. All submittals shall include, at a minimum, all the following information:

1. Complete name of the building and/or Project.
2. PSFA Project Name and PSFA Number, if applicable.
3. Complete physical address, to include city, county, state and zip code of job site.
4. Occupancies and Classification's per IFC and IBC 2021 Editions.
5. Occupant load of building or specific areas.
6. Square footage of each fire area(s), and combined for entire facility.
7. All fire protection system(s) installed or to be installed, and location.
8. Elevator locations, new or existing, and whether Firefighter Recall equipped.
9. Name of Fire Protection Installer with full address and telephone number.
10. Fire Protection Installer Point of Contact name, title, direct telephone number, and email address.
    NM Certificate of Fitness License Number
    - NM Licensed Professional Engineers Stamp with original signature on each page.

11. Designers shall be a minimum of a NICET Level III or higher for water-based fire protection systems and fire alarm system design. The NICET certified party name, certification number, expiration date of certification, and signed initials shall be on the plans.
    a. Scope of Work with applicable notes.
12. Each page shall provide a minimum of 3x5" box to apply SFMO stamp.
13. Plans shall include a scale and indicate a north arrow.
14. Device legend and symbols in accordance with NFPA 170, or other symbols approved by the AHJ.
15. Legend shall indicate a symbol for each device, appliance, or appurtenance related to fire protection systems.
16. Site Plan with specific areas of work, no work, and phased work, if applicable.
17. Phase work shall be included on separate sheets of submitted plans.
18. Floor plan shall indicate location of all fire protection system(s) and appurtenances, and whether new or existing, full or partial, and indicate if at other than ground level.
19. 1 electronic copy shall be submitted.
20. Digital plans shall be submitted in either PDF, or other approved digital method, so long as the SFMO can support the program. Digital plans shall include all necessary information.
21. Digital plans may be submitted to sfmo.plans@dhsem.nm.gov
22. All indoor rooms and outdoor areas shall be properly identified by name and/or use.
23. Location, labeling and number of all alarm-initiating devices and alarm notification appliances on floor plan.
24. Drawings and calculations shall clearly show a floor plan of each story, indicating the location of all exits, areas of refuge, walls, partitions, and fire rated assemblies, and the intended use of each area, room, or void space.

Fire Alarm - Requirements

All submittals for fire alarm installations shall include what is required in the Plan Submittal Requirements and the following information:

1. Designed in accordance with NFPA 72, 2019 Edition or newer
2. Type and classification of fire alarm system wiring.
3. Riser Diagram with single line riser diagram for devices on the fire alarm system for:
    a. Initiating devices.
    b. Notification appliances with candela ratings and mounting configurations.
    c. Elevator recall.
    d. Door holding devices.
    e. Access control devices.
    f. Egress control devices.
    g. Module relays.
    h. Indication whether new or existing on each appliance or appurtenance.
4. Sequence of Operations diagram.
5. Fire alarm equipment and/or manufacturer specifications.
6. Communicator selection and location.
7. Fire Document box location.
8. Approved signage indicating “Fire Alarm Control Panel located inside”.
9. Source of primary and secondary power.
10. Battery and voltage drop calculations, if applicable.
11. HVAC units that are rated over 2,000 CFM shall have duct detection.
12. All fire protection and life safety systems such as water supply tanks, fire pumps, generators shall be monitored by the fire alarm control panel.
13. Fire Alarm Control Panel shall be installed in an approved location. Note: An annunciator may be required at an approved location by the fire code official.
14. A Record of Completion, as outlined in NFPA 72 2019 Edition, shall be provided by the installing contractor prior to requesting to schedule for a Final Acceptance Test.
15. Where field conditions necessitate any changes from the approved plans, a set of amended construction documents, often referred to as “as-builts”, shall be submitted for review and approval. These plans shall comply with all plan submittal requirements.

Fire Sprinkler – Specific Requirements

All submittals for fire sprinkler installations shall include what is required in the Plan Submittal Requirements and the following information:

1. Designed in accordance with NFPA 13, 13R, and 13D, 2019 Edition or newer
2. Type and schedule of piping
3. Fire sprinkler riser diagram with:
    a. Inlet from below ground
    b. PIV location and type
    c. FDC
    d. Backflow preventer(s)
    e. Indicating valves (supply, test valves and drain valves)
    f. Water flow switches
    g. Main drain valve
    h. Standpipes
    i. Fire hydrants, to include hydrants used to perform flow tests.
    j. All specifications for valves, backflow preventers, piping, victaulic connectors, seismic bracing, hangars, sprinkler heads, escutcheons, flex pipes, etc.
4. Fire sprinkler equipment and/or manufacturer specifications.
5. Indication of water source(s).
6. Hydraulic calculations with a minimum of 10 PSI safety factor.
7. Location of connected systems such as water supply tanks, fire pumps, and generators.
8. System riser detail shall include spare sprinkler box, appropriate number of sprinkler heads, sleeve with appropriate nominal spacing at the base of the riser, and approved signage indicating "Fire Sprinkler Riser Room".
9. A signed above- and below-ground test certificates, as outlined in NFPA 13 2019 Edition, shall be provided by the installing contractor prior to requesting to schedule for a Final Acceptance Test.
10. Where field conditions necessitate any changes from the approved plans, a set of amended construction documents, often referred to as "as-builts", shall be submitted for review and approval. These plans shall comply with all plan submittal requirements.
11. Drawings shall clearly indicate total area, expressed in square feet, per floor protected by each system riser.
12. Drawings shall include full height cross-section elevation detail(s) indicating construction, and vertical/horizontal distances of sprinklers relative to underside of roof/ceiling and structural members.
13. Drawing legend shall indicate the manufacturer, temperature rating, orifice size, hydraulic K-Factor, and quantity of each type of sprinkler to be installed.
14. Provide a copy of water flow test results (dated within one year of drawing submittal date).
15. Drawings shall indicate a minimum temperature of 40 degrees Fahrenheit will exist for sprinkler system installation, if applicable.
16. Hydraulic calculations shall be prepared on form sheets that include a summary sheet, detailed work sheets, and a graph sheet.
17. Calculation summary sheet shall indicate the hazard classification. When multiple design densities are required to protect various hazards within a common system area, separate calculations shall be provided for each hazard area.

Fire Pump – Specific Requirements

All submittals for fire pump installations shall include what is required in the Plan Submittal Requirements and the following information:

1. Designed in accordance with NFPA 20, 2019 Edition or newer shall be used
2. Name of commissioning party with complete physical address, to include city, county, state and zip code.
3. Make and model of pump.
4. Pump Rating _____gpm. @ _____psi _____rpm.
5. Suction main size, length, location, weight, and type of material, and point of connection to water supply, as well as size, and type of valves, valve indicators, regulators, meters, and valve pits, and depth to top of pipe below grade.
6. Water supply capacity information including the following:
    a. Location and elevation of static and residual test gauge with relation to the riser reference point.
    b. Flow location
    c. Static pressure, in psi
    d. Residual pressure, in psi
    e. Flow, in gpm.
    f. Date
    g. Time
    h. Name of person who conducted the test or supplied the information
    i. Other sources of water supply, with pressure or elevation
7. Pump driver details including manufacturer, horsepower, voltage, or fuel system details.
8. Controller manufacturer, type, and rating.
9. Suction and discharge pipe, fitting, and valve types.
10. Test connection piping and valves.
11. Flow meter details (if used).
12. Jockey pump and controller arrangement, including sensing line details.

Water Storage Tanks – Specific Requirements

All submittals for water storage installations for fire protection shall include what is required in the Plan Submittal Requirements and the following information:

1. Designed in accordance with NFPA 22, 2019 Edition or newer.
2. Above or below ground tank.
3. Insulated or non-insulated.
4. Capacity in gallons.
5. Whether dedicated primarily for fire suppression, or fire suppression and domestic use (include percentages or gallons).
6. Replenishment rate.
7. Location of fire hydrant.
8. Location of FDC.
9. Location of water temperature and water level sensing devices.
10. All technical data pertinent to the storage tank shall be included.

Wet Chemical Suppression Systems

All submittals for wet chemical suppression system installations shall include what is required in the Plan Submittal Requirements and the following information:

1. Designed in accordance with NFPA 17A, 2020 Edition or newer.
2. Show hood and duct dimensions (length, width, and height in inches) in relation to room.
3. Appliance type, dimensions, and location in relation to hood installation.
4. Size, type and number of cylinders/tanks.
5. Total number of flows permitted, and how many utilized.
6. Legend which indicates number, style, location, and temperature rating for all fusible links and nozzles.
7. Number and location of manual pull station(s).
8. Number and location of exits.
9. Type, number, and location of automatic shut off devices and/or electrical shunts.
10. The details on the system shall include the following:
    a. Size, length, and arrangement of connected piping.
    b. Description and location of nozzles.
    c. Indication of elbows.
11. Information shall be submitted pertaining to the following:
    a. The location and function of detection devices.
    b. Operating devices.
    c. Auxiliary equipment.
    d. Electrical circuitry.
12. Moving cooking equipment shall be provided with a means to ensure that it is correctly positioned in relation to the appliance discharge nozzle during cooking operations.
13. Number and location of Class K fire extinguishers.
14. Number and location of audiovisual notification appliance. If a fire alarm system is not provided, at least one audiovisual notification appliance shall be installed in an approved location.
15. Manufacturer's specifications for nozzle placement.
16. Manufacturer specification sheets/information for all appurtenances.

Clean Agent Systems

All submittals for wet chemical suppression system installations shall include what is required in the Plan Submittal Requirements and the following information:

1. Designed in accordance with NFPA 2001, 2018 Edition or newer
2. Size, type, number, and location of cylinders/tanks and securing method
3. System riser diagram
4. Sequence of Operation diagram
5. Manufacturer specifications for all appurtenances/system
6. Legend which indicates number, style, location, and types of all appurtenances, panels, relays, modules, nozzles, detection equipment, etc.
7. Whether clean agent system is networked or independently connected to an approved fire alarm system
8. Type, number, and location of automatic shut off devices and electrical shunts, if applicable.
9. The details on the system shall include the following:
    a. Size, length, and arrangement of connected piping
    b. Type and location of nozzles
    c. Scaled diagram of enclosure, to include any openings
10. Identification of the hazard to be protected
11. Notification appliances dedicated to the clean agent system shall differ in color from any existing building fire alarm devices. These appliances shall indicate “AGENT”, “Clean Agent”, or similar approved verbiage.
12. Whom shall perform the door fan test.

FINAL ACCEPTANCE CHECKLIST

To schedule a Final Acceptance Test, the following information shall be emailed to sfmo.inspections@dhsem.nm.gov

- Date or time frame requested to conduct Final Acceptance
- Fire Protection Systems involved, i.e. Hood suppression system, Fire Alarm, Fire Sprinkler, Clean Agent, Fire Pump, elevators etc.
- Name of the facility, as indicated on plans
- Complete address of the facility (address, city, county, state, zip code)
- Point of Contact (First and Last Name) and Title (i.e. Project Manager, Contractor, Superintendent, etc.)
- Point of Contact Company Name
- Point of Contact direct email address
- Point of Contact direct cell phone and office number
- Number of Buildings
- Square footage of the building(s)
- Number of stories
- Scanned copies of all pre-testing documentation, i.e. above- and below-ground, flushing, Record of Completion, door fan tests, electric or mechanical shunting devices, makeup air, and any other proof of functional tests.