

New Mexico Public Regulation Commission

***NEW MEXICO
STATE FIRE MARSHAL'S OFFICE***



***PLANS REVIEW SUBMITTAL REQUIREMENTS
& INFORMATION***

STATE FIRE INSPECTIONS SECTION

Revised: March 12, 2007

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ATTACHMENT: HANDBOOK FOR NEW MEXICO BUILDING OFFICIALS, SECTION 1, REQUIRMENTS FOR PROFESSIONAL SEALS.	

Final Inspections & Acceptance Testing

Any fire alarm system, sprinkler system, or fixed pipe fire extinguishing system that has been installed (within the jurisdiction of the SFMO only) prior to review and approval of all shop drawings by the Fire Inspections and Plans Review Section, **WILL NOT** be inspected, tested, or accepted. The SFMO will no longer review nor accept shop drawings for any system that has been installed prior to review and approval.

Furthermore, all fire protection systems contractors are required to provide original stamped drawings, which have been reviewed by the SFMO, present at the site during final inspection. Failure to provide the original stamped drawings, and review letter at the site, will result in immediate termination by the Field Inspector.

Additionally, any shop drawing, which is presented during final inspection, which appears to have a photocopied review stamp from the SFMO, or non-original review stamp, which matches the dates of the review letter, may result in revocation of the FP contractor's Certificate of fitness, and immediate termination of the inspection and test.

This policy is subject to written appeal to the State Fire Marshal.

Appeal requests shall be forwarded to the following address:

John C. Standefer, State Fire Marshal
New Mexico State Fire Marshal's Office
P.O. Box 1269
Santa Fe, New Mexico 87504

Certificate of Fitness Requirements

Effective December 1, 2005 all applicants providing submittals to this office for any Fire Detection, suppression, or Life Safety System will be required to possess a current Certificate of Fitness from this office. A copy of the Certificate will be required, for review by the SFMO inspector(s) conducting acceptance tests for the installed system(s) in question. Upon receipt of each submittal SFMO Plans Examiners will verify that the applicant has a valid Certificate of Fitness on file. If it is discovered that the applicant requesting review does not possess a valid Certificate of Fitness, the submittal will be returned, until a valid Certificate can be obtained. Please ensure to have a Xerox copy of your certificate of fitness at the time of Final Inspection and testing. If this information is not provided at the time of test, the test will be cancelled and rescheduled until a valid Certificate of Fitness can be obtained, and can also be presented at the site for review. This information is required for our reporting system.

If your company does not possess a valid Certificate of Fitness from the SFMO, you may contact the State Fire Marshal's Office at (505) 827-3728, or online at www.nmprc.state.nm.us to obtain an application form.

Please remember that a SFMO issued Certificate is now Valid for **Two (2) Calendar years**, and must be renewed prior to expiration of the current certificate.

NOTICE

Expired Certificates of Fitness from the SFMO, or Certificates issued by other Fire Authorities will not be accepted as substitutes for the required documentation. Failure to provide current Certificate of Fitness information will result in rejection of submitted shop drawings, and cancellation of Final Inspections.

Certification of Submittals by a Professional Engineer

Effective January 1, 2007, All Fire Protection Systems Contractors, requesting review of shop drawings for fire protection systems shall comply with the following documents,

1. **The Handbook for New Mexico Building Officials**
2. **Article 61 of the Engineering & Surveying Practice Act, New Mexico State Statutes NMSA 1978.**
3. Requirements for a Professional Engineer's seal are outlined in Handbook for New Mexico Building Officials. **ALL SUBMITTALS MUST BE SEALED BY A PROFESSIONAL ENGINEER**, or will otherwise be returned for correction.
4. The original design shall be by conducted by a NICET Level III Technician, at minimum, who is an employee of the company contracted to install the perspective system. The design must be reviewed and stamped by a registered professional engineer in accordance with the building official's handbook.
5. Professional Engineers utilized, shall be a Registered Professional Engineer within the State of New Mexico. PE Stamps from other states/jurisdictions will not be accepted.
6. The Fire Protection Contractor Shall forward the PE review comments to the SFMO, with all appropriate changes, which the PE may have identified.

The Hand Book for New Mexico Building Officials, and the Engineering & Surveying Practice Act, can be obtained Online at the New Mexico Board of Professional Engineers & Professional Surveyors website by typing in the following web address

**Online Handbook for Building Officials
NM Board of Licensure for
Professional Engineers and Surveyors**

<http://www.sblpes.state.nm.us/handbook.html>

Review of Architectural & Engineering Plans

Architectural Plans will no longer be reviewed for compliance of fire doors and separations within a proposed project. If plans are submitted for such purposes, they will be returned to the submitting company, indicating rejection, and requesting shop drawings for fire protection systems. Fire Doors and separations are under the jurisdiction of the Construction Industries Division. Inquiries of fire doors and separations should be referred to the local CID inspector, or by contacting the Construction Industries Division Plans Review Section at (505) 476-4700. Architectural reviews for public schools shall be forwarded to the Public Schools Facility Authority, by contacting them at (505) 843-6272.

Faxed Shop Drawings

All Fire Protection Systems shop drawings shall comply with the guidelines listed in this document. Faxed shop drawings will not be accepted by the SFMO. Any drawings that are received by fax, will be disapproved and returned to the applicant indicating the reason for disapproval, and requesting that appropriate size drawings are re-submitted to the SFMO, in accordance with the conditions listed in this Document.

Return of Submitted Plans & Drawings

Effective May 1, 2000 the SFMO will no longer pay postage to have drawings, plans, and other ordinary envelopes returned to their respective destination after review and stamp approval.

Parties submitting drawings and/or plans for review may send prepaid postage or parcel shipping documents with shipping box or container, or drawings that have been submitted to the SFMO can be retrieved in person from the State Fire Marshal's Office at the address listed below, Monday through Friday from 8:00 AM to 5:00 PM.

IMPORTANT NOTICE

Parties wishing to pick up their perspective projects after review will have no more than thirty (30) days to pick up their submittals from our office. Submittals left more than thirty (30) days after notification of review completion will be discarded, as the SFMO does not have facilities available for holding and archiving shop drawings. Your company will be notified after each review has been completed, so arrangements may be made to retrieve your submittals.

OFFICE LOCATION

**NEW MEXICO STATE FIRE MARSHAL'S OFFICE
604 W. San Mateo Suite B, Upper Level
Santa Fe, NM 87505**

FIRE DETECTION & ALARM SYSTEM PLAN SUBMITTAL GUIDELINES



The State of New Mexico has adopted into law (10 NMAC 25.5) The International Code Council's, International Fire Code, 2003 edition, which requires the submittal of drawings or plans for all fire alarm systems within the jurisdiction of the State Fire Marshal's Office. All submittals must include all of the following information.

1. Name and Address of the building or facility.
2. Occupancy Classification per NFPA 101 Life Safety Code, or 2003 International Building Code.
3. Site Plan, if more than one building is to be covered by the Fire Alarm System.
4. Scaled floor plan with location of all fire alarm system devices that are drawn to scale or dimensioned for verification of spacing for fire alarm devices. The floor plans may in full, half, or quarter size scale. Only two copies of the submittal are required for review. Additional copies may be sent, if the applicant so desires.
5. **Labeling of all floor areas and labels of what each room or space is to be used for by the occupants of the building.**
6. **Drawings Shall clearly indicate if the facility is protected by a full or partial sprinkler system.**
7. Labeling of all fire alarm control panels, annunciator panels, digital alarm communicators, or other off-site premises reporting devices, and services.
8. Location of all means of egress, such as exits, emergency means of egress windows, and areas of refuge.
9. Location and number of all alarm-initiating devices and alarm notification appliances on floor plan. Indicate mounting height of all devices, and where required to be provided with ceiling initiating devices (smoke detectors, heat detectors, beam detectors, etc.) Also indicate the type of ceiling layout.
10. When applicable provide a scaled cross-section of detector mounting locations for door closure operations in accordance with NFPA 72, National Fire Alarm Code, 1999 Edition.

11. Elevator shafts or dumb waiter shafts also include any vertical or horizontal open spaces that may be used for other purposes.
12. Type and classification of fire alarm system wiring.
NOTE: All fire Alarm system wiring must be installed in accordance with Article #760 of NFPA 70 National Electrical Code.
13. Riser Diagram-Provide a single line riser diagram for devices on the fire alarm system for:
 - (a) Initiating devices
 - (b) Indicating devices
 - (c) Elevator recall
 - (d) Door hold open functions
 - (e) Special locking devices
 - (f) HVAC controls
14. Zone Schedule (Multi-Zoned System) for non-addressable fire alarm control panels.
15. Description and listing of special supervisory or monitoring devices.
16. Fire alarm equipment specifications (Manufacturers cut sheets).
17. UL or FMR listing cards for verification of cross listing of fire alarm devices when not of the same manufacturer.
18. Source of primary and secondary power. The installer is required to submit battery calculations (Secondary Power Source) for the type of equipment to be installed.
19. Name and address of the installing contractor.
20. All fire suppression and extinguishing equipment must be connected to the main fire alarm control panel for monitoring.
21. All HVAC and duct detection devices must be connected to the main fire alarm control panel for monitoring. Once connected to the FACP, these devices shall report as a **Supervisory Signal**.
22. Verify size of HVAC system in CFM rating to determine requirement for duct mounted smoke detectors. HVAC units that are rated over 2,000 CFM require duct detection.
23. Other systems as water supply tanks, fire pumps, generators and other essential equipment must be connected into the main fire alarm control panel for monitoring.
24. Dedicated / non-dedicated smoke removal systems, shall be activated or monitored as required per applicable NFPA codes and other standards as they may apply.
25. The following are mandatory installation requirements for all fire alarm systems.
 - a. A dedicated electrical service is required for all main fire alarm control panels. This includes all-remote sub-panels and power boosters.
 - b. A protective guard is required to be installed on the electrical circuit breaker for the main fire alarm control panel and all sub-panels.

- c. Identification or labeling of the circuit breakers for the main fire alarm control panel and sub-panels is required in the electrical circuit breaker panel.
- d. **IMPORTANT!!** All devices that are to be installed, **MUST** be identified on the shop drawings. Failure to identify all devices in the proposed system will result in cancellation of final inspection. Additionally a re-submittal of shop drawings will be required, prior to final inspection and acceptance of the proposed system.

26. The overall design, installation and components of the fire alarm system are required to meet the requirements as listed in NFPA #72 National Fire Alarm Code (1999 Edition), NFPA 1 Fire Prevention Code (1997 Edition), and NFPA 101 Life Safety Code (1997 Edition) and other applicable codes with reference to other or special fire protection systems. The 1999 editions of NFPA 72 and NFPA 70 shall also be indicated.

Note: The NMSFMO has adopted and is following the 2003 International Fire Code, which reference 1999 NFPA standards

- 27. The fire alarm wiring installation must meet the requirements of Article #760 of NFPA 70 National Electrical Code.
- 28. Fire Alarm Control Panels **SHALL NOT** be installed in closets IS Rooms, Basements, and other ancillary rooms. By Requirement of the SFMO, all FACPs, Shall be installed in the facility Lobby, reception area, or Office, where it is attended by staff during occupancies during all normal hours of operation. Remote annunciator panels shall be installed at the main entrance, if the FACP is installed in any area other than the main lobby.
- 29. A "Record of Completion" as per NFPA 72 National Fire Alarm Code Chapter #1 Section #1-7.2.1 is required to be provided by the installing contractor at the time of the final inspection and acceptance testing.
- 30. A Final Review by a New Mexico Registered Professional Engineer, and design by a minimum of a NICET Level III Technician shall be completed, prior to forwarding the submittal to the SFMO for AHJ approval. This Policy is explained on Page 4 of this document.
- 31. Where field conditions necessitate any substantial changes from the approved plan, a set of corrected plans shall be submitted for review and approval.
- 32. All shop drawings shall be original drawings from the Fire Protection Contractor. The Applicant shall not submit, Architectural, or Engineering Plans as substitutes. Additionally, shop drawings shall be clear and to scale and shall not be photocopied floor plans, which will result in disapproval of the submittal.
- 33. **NOTE: Any deviations from submitted shop drawings (i.e. removal, relocation, or addition of devices) that have not been approved prior to any changes being made will result in failure of system, and occupancy of the building covered by the project. Additionally, a re-submittal of shop drawings will be required. Re-submitted drawings shall indicate any and all device removals, additions, and deletions.**

AUTOMATIC FIRE SPRINKLER SYSTEM SUBMITTAL GUIDELINES



The following is the minimum information needed for plans submittal for automatic fire sprinkler systems;

1. Project Name
2. Physical Address

NOTE: All shop drawings shall be submitted for review and approval through the local fire authority or the New Mexico State Fire Marshal's Office; whoever may have jurisdiction.

3. A maximum of One (1) Copy of shop drawings, calculations, and submittal data shall be provided to the New Mexico State Fire Marshal's Office (NMSFMO) with a copy of the Construction Industries Division Permit, which permits evaluation of the system **PRIOR TO** installation. Upon request for review of drawings, the designer shall clearly designate the system as being **required** for compliance with the appropriate building and fire code or any other applicable codes, standards, or installed as an **elective** system at the discretion of the owner.

GENERAL INFORMATION REQUIRED

4. Shop drawing submittals to the NMSFMO shall be reviewed and Stamped by a Professional Engineer, who is registered within the State of New Mexico. Guidelines for the PE review are listed on Page 4 of this document.
5. **Shop drawings and calculations shall be prepared as outlined by NFPA 13 Standard for the Installation of Sprinkler Systems (1999 Edition)**
6. Shop drawings and calculations shall clearly indicate the following.
 - (a) Name of owner and/or occupant
 - (b) Project street address
 - (c) Tenant space designation and labeling
 - (d) The responsible designer's name, address, and telephone number.
 - (e) Total Square Footage For the project
7. Shop drawings and calculations shall clearly indicate the design standard(s) and edition used to prepare the submission. (For example: NFPA 13 1999 Edition or NFPA 13R 1999 Edition)
8. A minimum of a four-inch (4") underground water main is required for NFPA 13 and NFPA 13R systems.
9. System riser detail on the plans shall include spare sprinkler box, and sleeve at the base of the riser. Underground riser sweep shall be drawn in detail in plans.

10. Drawings shall include the following a schematic drawing of the fire protection underground, to include the following.
 - (a) Point of entry to the building
 - (b) Size and length of piping
 - (c) Point of connection to the city main and referenced water flow test location.
 - (d) Locations and types of valves, meters, backflow prevention devices.
 - (e) Location of water supply sources, other than city mains (storage tanks, wells, etc.)
11. Drawings shall be drawn to scale, on sheets of uniform size. Drawings and calculations shall clearly show a floor plan of each story, indicating the location of all walls, partitions, and fire rated assemblies, and the intended use of each area, room, or void space.
12. Drawings shall clearly indicate total area, expressed in square feet, per floor protected by each system riser.
13. 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.
14. Drawings shall clearly indicate the type and location of the following;
 - (a) Control Valves
 - (b) Test Valves
 - (c) Drain valves
 - (d) Alarm devices
 - (e) Hose outlets
 - (f) Fire department connections
 - (g) Inspector's test lines
 - (h) Fire Hydrants
15. Drawings shall clearly indicate the manufacturer, temperature rating, orifice size, hydraulic K-Factor, and quantity of each type of sprinkler to be installed.
16. Drawings shall clearly indicate the location of special sprinklers (example: extended coverage, sidewalls, intermediate/high temperature sprinklers).
17. Drawings shall clearly indicate, pipe types and wall thickness, type of fittings and joints, and the type and locations of hangars, sleeves, braces, and methods to support sprinkler components.
18. Drawings shall clearly indicate nominal pipe size, and length of pipe including riser/drop nipples.
19. **Hydraulically Designed Systems**
 - A. Hydraulic Data Name Plate Information:
 1. The minimum rate of water application (density)
 2. The location and size of the design area
 3. Inside and outside hose stream allowances as actually provided.
 - B. Hydraulic reference points shall be indicated on the plan corresponding with hydraulic calculation sheets

- C. Provide a copy of water flow test results (dated within one year of drawing submittal date)
- D. Minimum safety margin of 10% shall be allowed and indicated on the hydraulic calculation form.*
- E. Drawings shall clearly indicate method of maintaining minimum temperature of 40 degrees Fahrenheit for sprinkler system piping installed in unconditioned spaces.

20. Special Systems

- A. Drawings shall clearly indicate the make, type, model, and size of dry pipe, pre-action Or deluge valves.
- B. Drawings shall clearly indicate the water capacity in gallons of each dry pipe system.
- C. Drawings shall clearly indicate air pressure settings for valves and supervisory air functions at normal and abnormal conditions.

21. Hydraulic Calculation Forms

- A. Hydraulic calculations shall be prepared on form sheets that include a summary sheet, detailed work sheets, and a graph sheet.
- B. 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.
- C. The Calculation summary sheet shall include the following:
 - 1. Design density and total design area (example: .15 gpm /ft² / 1500ft²)
 - 2. Maximum area of coverage per sprinkler
 - 3. Total system demand at base or riser water for inside and outside and outside hose streams shall be represented as actually provided.
 - 4. Minimum safety margin of 10% shall be allowed and indicated on hydraulic calculation form.
 - 5. Graph Sheet: A graphic representation of the hydraulic demand shall be plotted on graph paper or computer generated hydraulic program based upon:
 - a. Water flow data (dated within one year of drawing submission)
 - b. Total sprinkler system hydraulic demand including hose streams.

22. Tenant Up Fit

Where existing systems are to be modified, sufficient details of existing system shall be shown on the plans to determine the effect of the proposed modification on total system.

- A. Provide complete floor plan of the building indicating start and end of the modification.
- B. Drawings shall clearly indicate location and floor level of the hydraulic remote area and it's design criteria.
- C. Work being performed in the hydraulic remote area shall include hydraulic calculations utilizing water flow test results (dated within one year of drawing submission date). This applies to modifications of twenty (20) Heads or more, only.
- D. When pipe schedule is to be used, all aspects under pipe schedule section of NFPA 13 shall be applied.

23. Limited Area Sprinkler System

- A. Provide a key plan showing the room space to be sprinkled. Provide location in the building and room number(s) floor, etc.
- B. Provide hydraulic calculations (including domestic water demand if sprinkler is supplied through a common meter) in accordance with NFPA 13, 1999 Edition.

24. Storage Occupancies

- A. Miscellaneous Storage less than 12' feet high
 - 1. Drawings shall clearly indicate commodity classification, maximum storage height, proposed storage arrangements, widths and locations of all aisles.
 - 2. Drawings shall clearly indicate roof/ceiling height within storage area.
- B. Miscellaneous Storage Greater than 12' high
 - 1. **Drawings shall indicate standard(s) used; NFPA 231, 231C, 231D, (1998 Editions) NFPA 30B (2000 Edition), NFPA 30 (2000 Edition)**
 - 2. Drawings shall clearly indicate commodity classification, maximum storage height, proposed storage arrangements, widths and locations of all aisles.
 - 3. Drawings shall clearly indicate maximum distance between sprinkler deflector and top of storage.
 - 4. Drawings shall clearly indicate rack configuration (width and height) and flue spaces (single row, double row, multiple row).
 - 5. Drawings shall clearly indicate method of storage wood pallets on racks, expanded plastic pallets on racks, solid shelving, open shelving, or encapsulated wrapping materials.

25. Fire Pumps

A. If a proposed project is to include a fire pump which supplies the system with adequate fire flow. Manufacturer's specification on the fire pump **MUST** be submitted with the shop drawings. The information should include all pertinent technical data in regards to operation, installation, and flow ratings. Failure to include this information will result in rejection of the submittal.

B. Fire pump Installation shall meet the requirements of NFPA 20 Installation of Stationary Pumps for Fire Protection (1999 Edition)

26. Water Storage Tanks

A. If the proposed system requires an on-site storage tank for fire protection. Manufacturer's specifications of all water tanks to be used within the proposed system shall be included with shop drawings. All technical data pertinent to the storage tank shall be included. Failure to include this information will result in rejection of the submittal.

B. Water storage tanks must meet the requirements of NFPA 22 Standard for Water Tanks for Private Fire Protection (1998) Edition.

27. Back Flow Prevention Devices

A. Manufacturer's specifications of any and all specialized backflow prevention devices that are to be included within the installation **MUST** be submitted with the shop drawings for the sprinkler system. All technical data pertinent to the devices shall also be included.

B. All aboveground backflow prevention devices shall be provided with tamper switches, which sounds an alarm to the main fire alarm control panel, on a supervisory or trouble signal. Additionally, back flow prevention devices, which are accessible to the public, shall be chained and locked in the open position, to prevent tampering.

28. Fire Department Connections

A. When the total system demands, including inside hose allowance is 750 GPM or less, the fire department connection riser shall be four (4) inches in nominal diameter, and have appropriate connections as required by code, unless otherwise approved by this office.

B. When the total system demands, including inside hose allowance is 750 GPM or greater, the fire department connection riser shall be six (6) inches in nominal diameter, and have the appropriate connections as required by code, unless approved by this office.

29. Fire Hydrants

A. Fire Hydrants to be installed on-site of a given project shall be clearly indicated on the site plan. Locations shall be shown in relation to the location of the Fire Department connection, and shall also include fire flow information for the protected premises.

RANGE HOOD FIRE EXTINGUISHING SYSTEM SUBMITTAL GUIDELINES



The following is the minimum requirements for submittal of range hood & fixed pipe fire extinguishing systems.

NOTE: All shop drawings shall be submitted for review and approval through the local fire authority or the New Mexico State Fire Marshal's Office; whoever may have jurisdiction.

Required Copies

One Copy of Proposed plans for range hood, duct, and fire extinguishing systems shall be submitted to the SFMO for review. Please forward copies of proposed plans to the following address;

ATTN: Plans Review
New Mexico State Fire Marshal's Office
604 W. San Mateo Suite B, Upper Level
Santa Fe, NM 87505

Requirements for Drawings

1. A drawing of system showing, duct, appliances, the nozzles and fusible links and the system. Plans shall also show the piping of the system, and the location of the system within the premise. This Drawing must be to scale.

NOTE: CAD drawings are preferred, but are not required, provided that the minimum information listed below is provided on the proposed drawings.

2. The drawing shall clearly indicate the type of system(s) and sizes of cylinders.
3. Drawings shall clearly indicate and show the type and number of automatic fuel shut off devices.
4. Drawings shall clearly indicate and show the number and type (in degrees F°) of the fusible links.
5. Drawings shall show and clearly indicate the manufacturer's nozzle numbers and type of nozzles.
6. Drawings shall clearly indicate the type of appliances protected with their surface dimensions (in inches).
7. Drawings shall clearly indicate, and show the HOOD and Duct dimensions (in inches/feet)
8. Drawings shall also clearly indicate the following;

- a. 16" Inch space between fryers, and open flame appliances.
 - b. Approved baffle type filters required.
 - c. Whether the System is single or tandem.
 - d. The system installed requires annual semi-annual and annual service (to include changing of the fusible links annually) by the "manufacturer" approved contractor/installer.
 - e. All other requirements by the Authority Having Jurisdiction.
9. The Plan shall also have the complete name and address of the authorized contractor.
 10. The Plans shall clearly indicate the complete name address, and telephone number of the premise where the system is being installed.
 11. Each submittal shall be Reviewed and Sealed by a New Mexico Registered Professional Engineer, or will otherwise be returned for correction.

12. Drawings must meet the minimum requirements as contained and outlined in NFPA 96 Standard for Ventilation Control & Fire Protection of Commercial Cooking Operations (2001 Edition) and the Uniform Mechanical Code (2003 Edition).

FAXED SHOP DRAWINGS

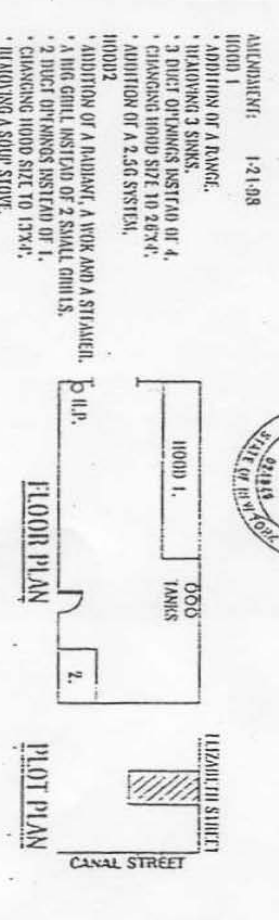
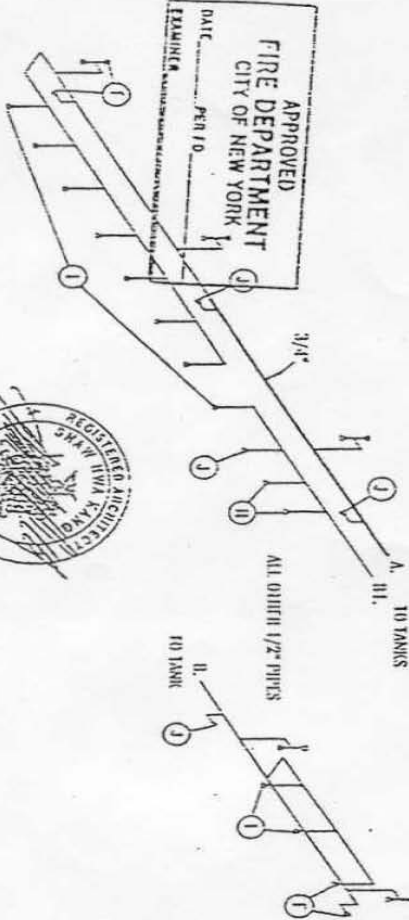
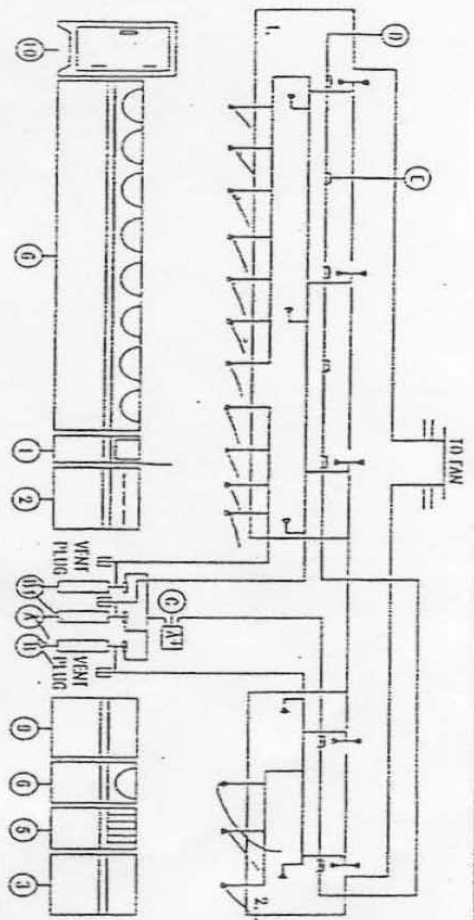
Fire suppression shop drawings shall comply with the guidelines above. Faxed shop drawings **will not** be accepted by the SFMO. Any drawings that are received by fax, will be disapproved and returned to the applicant indicating the reason for disapproval, and requesting that appropriate size drawings are re-submitted to the SFMO.

Please see the sample range hood and fire suppression system plans on pages 16 (CADD drawing) & 17 (Hand Drawing) for further information on our requirements for range hood suppression drawings.

DEVIATIONS, ADDITIONS, OR DELETIONS FROM ORIGINAL DRAWINGS

Any deviations from submitted shop drawings (i.e. removal, relocation, or addition of devices) that have not been approved prior to any changes being made will result in failure of system, and occupancy of the building covered by the project. Additionally, a re-submittal of shop drawings will be required. Re-submitted drawings shall indicate any and all device removals, additions, and deletions.

TYPICAL WET CHEMICAL RANGEHOOD SYSTEM



ITEM	QTY	MANUFACTURER	SIZE	MCA
A	1	RANGE GUARD	60"	18-516
B	1	RANGE GUARD	16"	UC 308
C	1	FUEL SHUT OFF	2.00"	18-516
D	1	REMOTE M. PULL STATION		
E	1	AUTOMATIC DETECTION		

ITEM	QTY	MANUFACTURER	SIZE	MCA
F	1	APP. NOZZLE	1.5554"	10"
G	1	APP. NOZZLE	1.5591"	4"
H	1	R. NOZZLE	K. 45110	OH NOZZLE

ITEM	QTY	MANUFACTURER	SIZE	MCA
1	1	FILTER	11" X 18"	
2	1	RANGE	30" X 21"	
3	1	GRILL	30" X 21"	
4	1	DIODEL		
5	1	CHARLAW	24" X 10"	
6	1	WORK (S)	12" X 22"	
7	1	SOUP STOVE		
8	1	SALAD BENDER		
9	1	STEAM	30" X 24"	
10	1	OVEN	24" X 24"	
11	1	TABLE		
12	1	SINK		

NOTES:

- (X) THERE MUST BE 1" BETWEEN FILTER & ANY OTHER BLADE
- (X) APPROVED - HAZLETYPE - GREASE FILTER SHALL BE PROVIDED BY OWNER FOR RANGE HOOD.
- (X) SYSTEM ARE RAISED 4' 00" OFF AS SHOWN.
- (X) CONTACT WITH N.Y. DOCS. CONT. 5 1931.
- (X) THIS PLAN IS APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SHEETS.
- (X) ALL OTHER MATTER SHOWN ARE NOT TO BE CONSIDERED OR RELIED UPON EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.
- (X) THE INSTALLATION IS SUBJECT TO STEAM/HEAT INSPECTION BY AUTHORIZED METALLURGICAL CONTRACTOR ONLY.

SCALE: 1/4" = 1'-0"

DATE: 12-1-07

APPROVED BY: HED

DESIGNED BY: JJP

PROJECT: 1770 EAST 170TH AVENUE, BLDG. 10, NY 10410
TEL: (718) 928-0424 FAX: (718) 863-2500

CLIENT: CHEMIST RESTAURANT
41-03 1770TH STREET NEW YORK, NY 10013

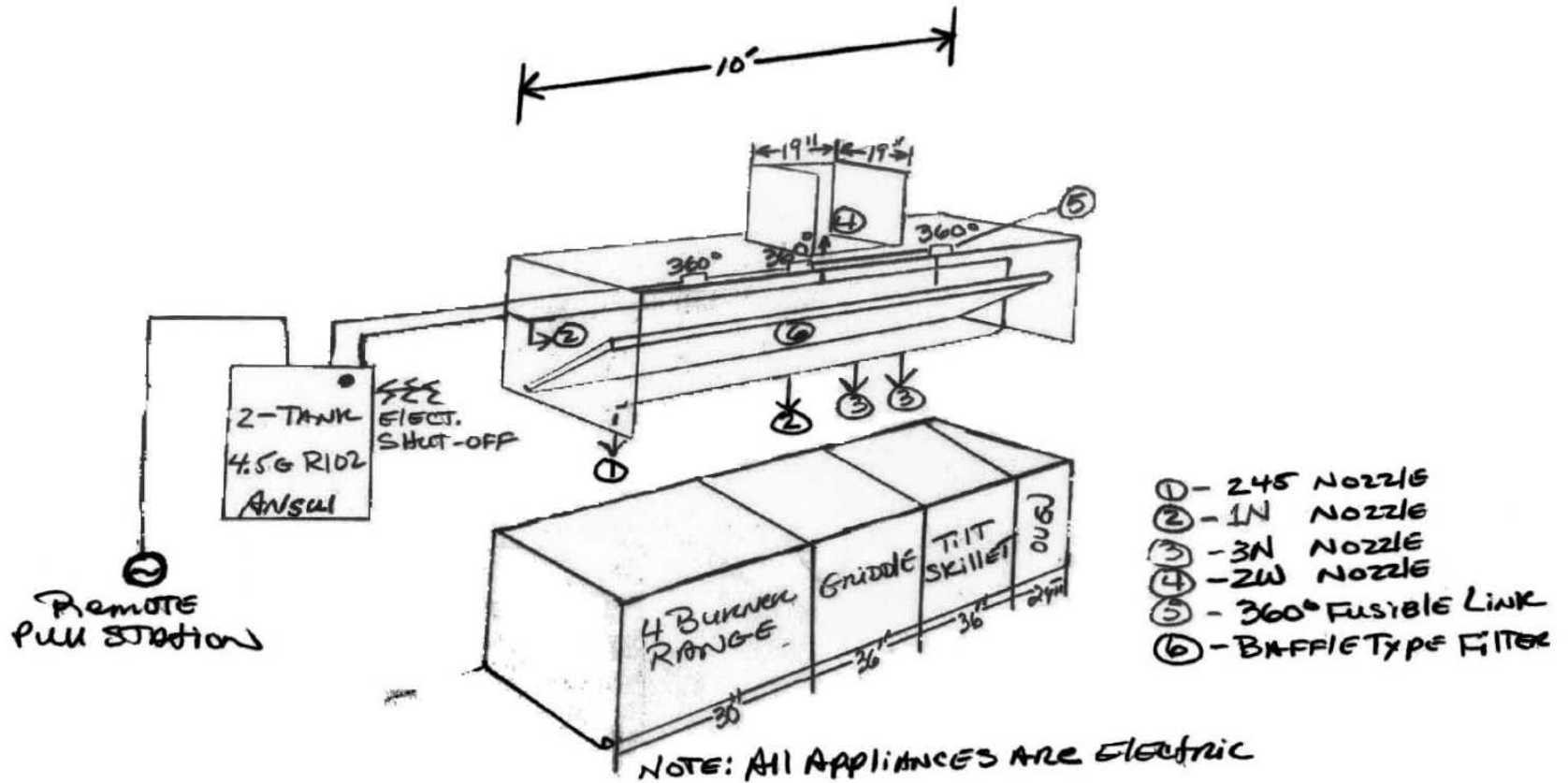
DRAWING NUMBER: A12165

APPROVED
FIRE DEPARTMENT
CITY OF NEW YORK



- ALTERMENTS:** 1-21-08
- HOOD 1
 - ADDITION OF RANGE.
 - REMOVING 3 SINKS.
 - 3 DUCT OPENINGS INSTEAD OF 4.
 - CHANGING HOOD SIZE TO 26'X4'.
 - ADDITION OF A 2.5G SYSTEM.
 - HOOD 2
 - ADDITION OF A RANGE, A WORK AND A STEAMER.
 - A BIG GRILL INSTEAD OF 2 SMALL GRILLS.
 - 2 DUCT OPENINGS INSTEAD OF 1.
 - CHANGING HOOD SIZE TO 13'X4'.
 - REMOVING A SOUP STOVE.

SAMPLE HAND DRAWING FOR RANGE HOOD FIRE SUPPRESSION SYSTEMS



ACME FIRE PROTECTION
2423 Central Ave.
Santa Fe, NM 87508
Ph; (505) 555-7865

George's Grill & Lounge 124 18th Street, Santa Fe, NM 87501	
Scale: 1/8"=1'	Drawn by: Frank Martinez, SE7
Date: 4/18/03	NICET Level IV Contractor
Installation of an Ansul R-102 Range hood fire suppression system, with Nozzles, fusible links, remote pull station, electrical shunt-trip, to conform to NFPA 17A and NFPA 96.	

CLEAN AGENT FIRE SUPPRESSION SYSTEMS



The Following requirements shall apply to all projects for Clean Agent Fire Suppression Systems which include, but are not limited to, FM-200, ECARO, & INERGEN Fire Suppression Systems. The Following Requirements shall be met prior to forwarding submittals to this office.

NOTE: All shop drawings shall be submitted for review and approval through the local fire authority or the New Mexico State Fire Marshal's Office; whoever may have jurisdiction.

Required Copies

Two (2) Copies of Proposed plans for clean agent fire extinguishing systems shall be submitted to the SFMO for review. Please forward copies of proposed plans to the following address;

ATTN: Plans Review
New Mexico State Fire Marshal's Office
604 W. San Mateo Suite B, Upper Level
Santa Fe, NM 87505

Requirements for Drawings

1. System shall be designed to meet the requirements of NFPA 2001 Standard on Clean Agent Fire Extinguishing Systems, 2000 Edition.
2. Drawings shall be To Scale, and be In CAD format, and shall clearly identify the areas to be protected.
3. Locations of Agent Storage Tanks, and shall also include size and Capacity of Agent for each Storage Tank.
4. A Diagram of the System Riser
5. Location of Nozzles to Include Pipe runs. Sizing of Pipe shall be indicated in the submittal.
6. Location of automatic Detection Equipment in accordance with NFPA 2001 (2000), and NFPA 72 (1999).
7. Location of wire runs for automatic detection equipment, showing tie in to suppression panel, and tie-in to main building fire alarm panel, in accordance with NFPA 72 (1999) and NFPA 70 (1999)
8. Location of manual activation devices, and abort switches, to include wire runs.

9. All Audio/Visual Equipment, which is primarily dedicated to the Clean Agent system, shall differ in color from the Building Fire Alarm System.
10. A sequence of Operation shall be included with the submittal.
11. Plans Shall include the following Fire Protection Contractor Information,
 - a. Name of Company Installing The System
 - b. Complete Contractor Address
 - c. Telephone Contact Information
 - d. Name of designer, and NICET certification Information, if applicable.
12. The Complete Premise Address, Telephone number of where this system is to be installed.
13. Design by a minimum of a NICET Level III Technician shall be completed, prior to forwarding the submittal to the SFMO for AHJ approval. This Policy is explained on Page 4 of this document
14. Each submittal shall be Reviewed and Sealed by a New Mexico Registered Professional Engineer, or will otherwise be returned for correction.



Fire Code Enforcement Bureau Contact Information



Physical Mailing Address

New Mexico State Fire Marshal's Office
Plans Review Section
604 W. San Mateo, Suite B
Santa Fe, NM 87505

Telephone Contact Information

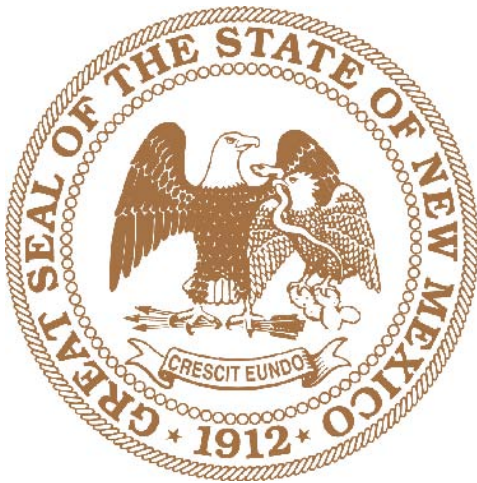
Toll Free: 1-800-244-6702
Fire Code Enforcement Bureau: (505) 827-3728
FAX: (505) 827-3778

INSPECTIONS SECTION STAFF

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Handbook for New Mexico Building Officials

SEALING REQUIREMENTS



**PUBLISHED BY THE JOINT PRACTICE COMMITTEE OF THE NM BOARD
OF EXAMINERS FOR ARCHITECTS, THE NM BOARD OF LICENSURE FOR
PROFESSIONAL ENGINEERS AND PROFESSIONAL SURVEYORS,
THE NM BOARD OF LANDSCAPE ARCHITECTS**

Revised 2007

I. Requirements for Professional Seals

A. General

The State of New Mexico requires professional seals on construction drawings submitted for permit in order to protect the public's life, safety and welfare.

A requirement of critical importance to a building code jurisdiction is:

When any professional seal is required for a building permit, according to the building type, occupant load or valuation of the project, every standard page of the construction documents must bear a professional seal, with signature and date, certifying professional responsibility for every aspect of the project. Referenced serial drawings (governmental and institutional drawings and details) do not require a seal. These drawings and details are the responsibility of the issuing agency. (See Section 1C: Use of Professional Seals page 3 for specific details on sealing documents)

Occupancy is a determining factor in the requirement for professional seals. Occupancy is always calculated in accordance with the current, adopted code.

Whenever any addition to a building or structure is submitted for permit, the occupant load is calculated on the combined square footage of the existing structure and the new structure.

B. Seal Requirements

1. No Professional Seal Requirement

The following construction projects do not require the seal of an architect, engineer, surveyor or landscape architect, unless the building official determines such seal is necessary to protect public life, safety and welfare:

- a. Single-family dwellings not more than two (2) stories in height;
 - b. Multiple dwellings not more than (2) stories in height containing not more than four (4) dwelling units of wood-frame construction; provided this paragraph shall not be construed to allow a person who is not registered under the Architectural Act to design multiple clusters of up to four (4) dwelling units each to form apartment or condominium complexes where the total exceeds four (4) dwelling units on any lawfully divided lot;
- Garages or other structures not more than two (2) stories in height which are appurtenant to buildings described in Paragraphs a and b above;
 - Nonresidential buildings, as defined in the current adopted code, or additions

having a total occupant load of ten (10) or less and not more than two (2) stories in height. However, E-3 (Day Care), H (Hazardous), or I (Institutional) occupancies, must be certified by an architect or engineer regardless of the occupant load.

- e. Alterations to buildings or structures which present no unusual conditions, hazards, change of occupancy, or code violations.

[See the Architectural Act, §61-15-9 NMSA 1978, and C.I.D. Rules and Regulations 14.5.2.9 & 14.5.2.10 C NMAC]

2. Single Seal Requirement

- a. The single seal of either an engineer or architect meets the requirement for professional certification on non-residential projects and residences not exempted under Paragraph B which do not exceed a construction valuation of four hundred thousand dollars (\$400,000) AND do not exceed a total occupant load of fifty (50). The incidental practice provisions of both statutes establish this requirement.

[See the Architectural Act, §61-15-2(B) and Regulation 16.30.1.7.12 NMAC and the Engineering Act, §61-23-10 (H) and Regulation 16.39.4.8 NMAC]

- b. An architect must seal and sign all work prepared by the architect or under the architect's responsible charge. This includes work exempted from seal requirements. *[Architectural Act, §61-15-7A]*

- Gazebos and not fully enclosed picnic shelters, park structures, and shade structures may be sealed by an architect, engineer, or landscape architect. This would also include kits, prefabricated or pre-engineered structures for recreational uses.
- This does not negate the CID requirements for electrical, mechanical or other specialized certification, as needed.

3. Seals of Multiple Professions Requirement

The professional seals of both an architect and an engineer (or engineers) are required on non-residential projects and residences not exempted under Paragraph B with EITHER a construction valuation greater than four hundred thousand dollars (\$400,000) OR a total occupant load greater than fifty (50). Occupant load shall be in accordance with the current, adopted code.

[See the Architectural Act, §61-15-2(B) and Regulation 16.30.1.7.12 NMAC and the Engineering Act, §61-23-10 (H) and Regulation 16.39.4.8.3 NMAC]

4. Exceptions to the Multiple Seal Requirement

An architect, engineer, surveyor or landscape architect may submit a request to the appropriate board asking for a variance from the incidental practice rule. The request will be submitted to the Joint Practice Committee.

C. Use of Seals by Profession

It is illegal to use an out-of-state architect's, engineer's, surveyor's, or landscape architect's seal on any New Mexico project.

All professional services provided by architects, engineers, surveyors, and landscape architects in New Mexico shall be sealed, signed and dated as specified in this section.

Each qualified registrant will sign and seal only the document(s) for that portion of the work prepared by him or her.

1. Sealing Architectural Work

The following apply to the sealing of architectural work:

- Each original construction document and each cover sheet of reports and specifications prepared by, or under the direct supervision of an individual architect, must bear the imprint of the seal with the signature of that architect and the date of the signature closely aligned to the seal. *[Regulation 16.30.3.14.2 NMAC]*
- The name and current address of the architect must also appear on the sealed page.

[Regulation 16.30.3.14.2 NMAC]

- An architect must seal and sign all work prepared by the architect or under the architect's responsible charge. This includes work exempted from seal requirements. *[\$61-15-7A NMSA 1978]*
- Computer generated seals and signatures are permitted as long as the registrant utilizes a secure method of affixation.
- An architect's placing of the architect registration seal and signature on a document certifies that the architect has exercised direction, guidance and judgment on all issues pertaining to the health, safety and general welfare of the public.
- The architect accepts all legal responsibility for all architectural matters embodied in the document. *[Regulation 16.30.1.7.4 NMAC]*

[See sample architect's seal inside front cover of published book]

2. Sealing Engineering Work

The following apply to the sealing of engineering documents:

Each licensed professional engineer shall obtain a seal/stamp, which must appear on all design drawings and the certification page of all specifications and engineering reports prepared by the licensee in responsible charge. Adjacent to the seal/stamp shall appear the original signature of the licensee along with the date the signature was applied. Rubber stamps and all facsimiles of signatures are not acceptable. The seal/stamp shall be either the impression type seal, the rubber type, or a computer generated facsimile. Computer generated seals shall be bona fide copies of the actual seal/stamp. Electronic signatures as provided by law and Board's policy shall be acceptable. [Regulation 16.39.3.12 NMAC]

An engineer may only provide engineering services in areas in which he or she is professionally qualified, and shall use qualified engineers or architects for any portion of the work for which the contracting engineer is not qualified. [Regulation 16.39.8.9.2 NMAC]

[See sample engineer's seal inside front cover of published book.]

By sealing or signing engineering documents, the professional engineer accepts responsibility for the engineering work represented by the documents and that applicable engineering standards have been met. [§61-23-3M]