



FIRE SAFETY ENGINEERING Checklist

Fire Alarm Systems

City of Henderson
Development Services Center
Fire Safety Engineering
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This checklist is provided for the convenience of our customers. Complete and accurate plan submittals help speed the plan review process. Attention to the completeness and accuracy of information at the beginning of the process generally leads to fewer delays and requests for revisions by City staff. Please use the following information to assure that your application includes all of the information that is necessary for a complete review of your plans.

Part. 1 Applicant's Responsibility

Applicants are responsible for ensuring applications submitted are complete. Incomplete applications will result in plans being rejected for acceptance, or returned to the applicant during the review process. City service commitments will not apply to incomplete submissions.

Part. 2 Prerequisites

Plan Readability. Easily Read; legible; a readable typeface. Vivid contrast or difference in brightness between the light and dark areas of the drawing.

Part. 3 Applicable Codes

Plans shall meet the requirements of the adopted codes, ordinances and regulations.

- International Building Code with local amendments
- National Fire Alarm Code 2013 Edition
- Nevada State Fire Marshal Regulations
- Life Safety Report, if Applicable

Part. 4 Submittal Package

Provide the following information at the time you submit your application for a fire alarm permit.

- A completed fire alarm permit application
- Fee Estimator
- Plans
- Product data submittal

Part. 5 Plan Contents

Plans must contain the following minimum content requirements. This list is not intended to be all inclusive of every detail required on a set of fire alarm plans. Rather, it is provided to give an overview of the basic plan contents needed for the review of plan sets.

General

Cover Sheet

- Provide general project information including Project name, street address
- Provide Contractor's name, address, phone number, license numbers, license classification, and license limit
- Wet signature of the licensee (contractors Master or Qualified Employee)
- Wet signature of the NICET Level II designer (or Nevada registered Fire Protection Engineer) who prepared the plan or drawing. For plans prepared by NICET designers, the designers printed name and certificate number shall follow the signature

- Applicable codes, height and number of stories. *Nevada Blue Book*
- Occupancy classification. For all occupancies state the occupant load
- Fire alarm circuit classification (power-limited or non-power-limited)
- Class/style designation of all initiating device circuit (IDC), signaling line circuits (SLC) and notification appliance circuits (NAC)
- Conductor size and type
- Sequence of operation input/output matrix as required by NFPA 72.
- Symbol legend with equipment description (manufacturer's name and model number) and mounting description (surface, semi-flush, flush, and exterior)
- Symbols used shall comply with NFPA 170, 2009 edition*

Fire Protection

Fire Alarm Plans

- Site plan, indicating building orientation
- Floor plan drawn to an indicated scale (1/8" minimum) on sheets of a uniform size showing (sufficient clarity for readability)
 - Point of compass (north arrow)
 - A Graphic representation of the scale used on all plans
 - Walls, doors, windows, openings, stairs, elevators, passageways, high piled storage racks, etc., as applicable to depict the facility
 - Room use identification labels
 - Location of:
 - Alarm initiating devices:
 - Pull stations at every exit every level or only one at approved location
 - Smoke detector over the panel(s)
 - Interface to water flow and valve tampers switches as appropriate
 - Smoke detector coverage at 0.7*listed spacing or ~21 foot radius
 - Device Addresses or zone number
 - Notification appliances
 - Audible appliance (~80dB)
 - Visual appliance (all public spaces & corridors w/in 15' from all transitions in corridors)
 - Circuit and device number
 - Ceiling heights
 - Auxiliary controlled equipment
 - Auxiliary monitored equipment
 - Auxiliary systems
 - Annunciation equipment
 - Control equipment
 - Monitoring equipment

- Emergency voice alarm system – acoustically distinguishable space designations
 - Conduit routing and size
 - Location of end-of-line device
 - Device addresses (Addressable Systems)
 - Zone identification (conventional system)
 - Electrical power panel and circuit connection
 - Key plan
 - Ceiling height (ceiling mounted device and/or appliance)
 - Beam, joist, soffit or other projection extending below the ceiling
 - Mounting height detail for wall mounted device and/or appliance
 - Riser Diagram including the following:
 - General arrangement of the system, in building cross-section
 - Wall/shaft/stairwell and/or cable ratings when survivability or class A requirements apply
 - Type and number of circuits in each riser
 - Type and number of fire alarm system components/devices on each circuit, on each floor or level
 - City of Henderson Fire Alarm General Notes
 - Addressable Device list with descriptions
 - Battery calculation (all panels)
 - Circuit load calculation (all notification appliance & auxiliary circuits)
 - Voltage drop calculations for all notification appliance circuits, including remote annunciators and auxiliary appliances
 - Speaker power loss calculations
 - Product data submittal including a cover sheet index sheet listing products used by make and model number, manufacturer data sheets and listing information for all equipment, devices, materials, wire and cable
 - Design number and detail of penetration fire stop system when required
 - Any additional information determined necessary
 - Bill of Material or device count similar to the attached sheet. This is needed to calculate fees
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ATTACHMENT

SYMBOL LEGEND

QUANTITY	SYMBOL	DESCRIPTION
.		FACP SPRINKLER MONITORING PANEL MOUNT BOTTOM OF ENCLOSURE AT 54" A.F.F.
.		REMOTE BOOSTER POWER SUPPLY MOUNT BOTTOM OF ENCLOSURE AT 54" A.F.F.
.		REMOTE ANNUNCIATOR
.		DUCT DETECTOR (BY OTHERS)
.		ADDRESSABLE INPUT MODULE
.		ADDRESSABLE OUTPUT MODULE
.		SPRINKLER WATER FLOW SWITCH
.		SPRINKLER TAMPER SWITCH OR PIV
.		15 CANDELA STROBE ONLY. MOUNT IN 4S BOX w/ SGMR
.	15	15 CANDELA HORN STROBE. MOUNT IN 4S BOX w/ SGMR
.	30	30 CANDELA HORN STROBE. MOUNT IN 4S BOX w/ SGMR
.	75	75 CANDELA HORN STROBE. MOUNT IN 4S BOX w/ SGMR
.	110	110 CANDELA GENESIS HORN STROBE. MOUNT IN 4S BOX w/ SGMR
.		HORN ONLY. MOUNT IN 4S BOX w/ SGMR
.		PHOTOELECTRIC SMOKE DETECTOR MOUNT IN 4S BOX w/ 3.0 PLASTIC RING
.		HEAT DETECTOR 135 MOUNT IN 4S BOX w/ 3.0 MUD RING
.		PULL STATION
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.		ALL CONDUIT 1/2" w/ PULL STRING UNLESS OTHERWISE NOTED
.		FIRE SMOKE DAMPER
.		24V DOOR HOLDERS. MOUNT IN 4S BOX w/ SMGR. NOTE - 4S BOX SHOULD BE SCURELY ATTACHED TO WALL STURCTURE. FIELD VERIFY FOR DOOR OPENING AND HEIGHT DIMENSIONS
.		HI / LO ALARM
.		LOW TEMP / HI TEMP ALARM
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