**CLARK COUNTY FIRE DEPARTMENT - FIRE PREVENTION BUREAU**
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Permit Submittal Guideline

# FIRE ALARM SYSTEM
# FOUR DEVICES OR LESS

This guide is to assist in the permitting process for a fire alarm system with four devices or less. This permit process shall not be used for system upgrades. A permit is required for the installation or modification of a fire alarm system per section 105.6.7 of the IFC.

## APPLICABLE CODES:

The following codes and standard apply to this permit:

- *National Fire Alarm and Signaling Code*, NFPA 72, 2022 edition
- *International Fire Code* (IFC), 2024 edition
- *Clark County Fire Code Amendments*, (CCFC) 2024 edition

Fire alarm systems shall be installed and/or modified in accordance with Section 907 of the IFC, as amended by the CCFC. The design shall be in accordance with NFPA 72.

## SUBMITTAL REQUIREMENTS:

**These submittal requirements are not all inclusive, nor are they a limit to the extent of the information, etc., which may be necessary to properly evaluate the submitted plans and documents. Not all items may apply to your project.**

1. **Letter of Intent:** A letter can be submitted to permit the installation or modification of a maximum four (4) fire alarm devices and allow the initial rough electrical inspections to occur. **A plan is required to be submitted and approved prior to final fire inspections (the letter shall state this).**

   **A letter of intent for the intent to modify or install up to four devices shall include:**

   - Name and address of property
   - Contractor's contact information and contractor's license numbers
   - Building Permit number associated with the scope of work
   - Detailed scope of work including input/output sequence associated with the device(s)
   - Manufacturer's make and model number for all devices

2. **PLANS - Four devices or less:** to be designed to an indicated architectural scale, sized 30 x 42 inches and saved to a PDF file. Plans shall include all information applicable to project per NFPA 72, Section 7.4, as amended by the CCFC.

3. **CALCULATIONS:** The following calculations are required:
    - Voltage Drop per section 18.3.7.3 of NFPA 72 with CCFC amendments
    - Speaker Power Loss per section 18.3.7.4 of NFPA 72 with CCFC amendments
    - Battery Calculations per section 7.4.10 of NFPA 72 with CCFC amendments

    Note for Voltage Drop Calculations:
    Provide these when new appliances are added to existing notification appliance circuits. Also provide these whenever the circuit is extended more than 10 feet in all cases. The corresponding plans for the entire modified circuit shall be revised accordingly and submitted. The voltage drops shall not exceed two (2) volts unless all new and existing appliances use the UL-listed current draw at 16 volts.

    Note for Speaker Power Loss:
    Speaker power loss calculations shall be provided when the circuit modifications increase the power demand or when a circuit is extended by more than 10 feet. The corresponding plans for the entire modified circuit shall be revised accordingly and submitted.

4. **MATERIAL DATA:** Provide manufacturers' specification sheets for all components.

5. **SUPPORTING DOCUMENTS:** Provide supporting documents needed to evaluate the design. These would include the approved Fire Protection Report (FPR)/Alternative Material and Method Report (AMMR), the originally approved plans, requirements from the original design code of record, and existing component specification sheets that affect system performance.

6. **Plans are to be REVIEWED AND SIGNED** by a NICET Level 2 Designer in Fire Alarm Systems or a Nevada registered professional engineer working in the expertise of fire alarm design as per Section 901.2.2. of the CFCC. **Submittals shall include the designer's name, certification number and signature. Also include the licensee's name, contractor's license number, Nevada State Fire Marshal number, and signature.**