Clark County Fire Department
FIRE PREVENTION BUREAU
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PERMIT GUIDE
FIRE ALARM – 10 DEVICES OR LESS – NFPA 72

This guide is to assist in the permitting process for a modification of 10 devices or less to an existing fire alarm system. A permit is required for the modification of fire alarm systems per 105.7.7 of the IFC.

APPLICABLE CODES:

The following codes and standard apply to this permit.

- *National Fire Alarm and Signaling Code*, NFPA 72, 2016 edition
- *International Fire Code* (IFC), 2018 edition
- *Clark County Fire Code Amendments* (CCFC), 2018 edition

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

Link to CCFC: See the amendments to codes and standards using the link below:

https://cms8.revize.com/revize/clarknv/Building%20&%20Fire%20Prevention/Codes/ClarkCounty_FireCodeAmendmens2018.pdf?t=1598331770575&t=1598331770575

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. **PLANS:** To be designed to an indicated architectural scale and sized 30" x 42" saved to a .PDF file. Plans shall include all information applicable to project per NFPA 72 Section 7.4 as amended by the CCFC.
2. **CALCULATIONS:** Voltage drop calculations on the plans per NFPA 72 as amended by the CCFC NFPA 72 Section 18.3.2.4. Provide speaker power loss calculations on the plans per NFPA 72 as amended by the CCFC NFPA 72 Section 23.8.6.5.1. Provide battery calculations for all panels and power supplies per NFPA 72 Section 7.4.10.
    a. For an existing notification appliance circuit where new appliance(s) are being added to the circuit, voltage drop calculations will need to be produced. For an existing notification appliance circuit where no new appliances are being added to the circuit, voltage drop calculations will need to be produced either when the circuit modification adds load to that existing circuit or when the circuit is being extended by more than 10 feet. When voltage drop calculations are required, the entire existing modified circuit(s) shall be shown on the plans. Unless all of the new and existing appliances on a modified circuit utilize the UL-listed

current draws at 16 volts, the allowable voltage drop for the notification appliance circuit shall not exceed 2 volts.

b. For an existing speaker circuit, power loss calculations shall be produced either when the circuit modification adds wattage to that existing circuit or when the circuit is being extended by more than 10 feet. When power loss calculations are required, the entire existing modified circuit(s) shall be shown on the plans.

3. **MATERIAL DATA:** Provide manufacturer's specification sheets for all components.
4. **SUPPORTING DOCUMENTS:** Provide documents that support the design. These would include a copy of an approved Fire Protection Report (FPR)/Alternative Material and Method Report (AMMR), a copy of the originally approved plans, a description of the requirements from the original code of record, and existing component specification sheets that affect system performance.
5. **Plans to be REVIEWED AND SIGNED** by a NICET Level 2 Designer in Fire Alarm Systems or a Nevada registered Professional Engineer working in their area of expertise (per section 901.2.2. of the CFCC). **Submittals shall include the designer's name, certification number and signature, and shall also include the Licensee name, contractor's license number, Nevada State Fire Marshal number, and signature.**