



LAS VEGAS FIRE & RESCUE

Fire Prevention Division

Information Sheet



The items listed are basic information only. Please refer to adopted codes for specific details. Codes are subject to change. Additional requirements may apply.

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Ordinance # 6918

SMOKE DETECTION AND FURNACES/AIR CONDITIONING



Can your furnace set off your smoke alarm or detector? The answer, unfortunately, is a resounding yes. While it might seem unlikely, there are several scenarios where your furnace can trigger a false alarm, leading to unnecessary stress and potential inconvenience.

Smoke alarms and detectors are designed to alert you to the presence of smoke, a crucial safety feature in case of a fire. However, they are not always perfect, and sometimes, they can be set off by other factors, including your furnace. Here are the most common reasons:

- **Dust and Debris:** Furnaces, especially older ones, can accumulate dust and debris over time. When this dust gets heated by the furnace, it can release particles that resemble smoke, triggering the smoke detector/alarm
- **Malfunctioning Furnace Components:** A faulty furnace component, like a cracked heat exchanger, can release gases that resemble smoke. This can be particularly dangerous as it indicates a potential safety hazard within your furnace.
- **Dirty or Clogged Filters:** A dirty or clogged air filter restricts airflow, causing the furnace to work harder and potentially overheat. This can lead to the release of dust and particles that trigger the smoke detector/alarm
- **Improper Installation or Maintenance:** If your furnace is not installed correctly or not regularly maintained, it can become a potential fire hazard, increasing the risk of triggering the smoke detector/alarm.

If your smoke detector/alarm is going off, the first step is to determine if the furnace is the culprit. Here's a simple checklist:

- **Check for Visible Smoke:** Look for any visible smoke or signs of a fire.
- **Check the Furnace:** Inspect the furnace for any signs of dust, debris, or unusual noises.
- **Check the Air Filter:** Make sure the air filter is clean and not clogged.
- **Check the Smoke detector/alarm:** If the alarm is still sounding, check the smoke detector/alarm itself for any visible signs of dust or debris

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If you suspect your furnace is triggering the smoke detector/alarm, here are some steps to take:

- **Clean the Furnace:** Thoroughly clean the furnace and its surrounding area, removing any dust, debris, or cobwebs.
- **Replace the Air Filter:** Replace the air filter with a new one.
- **Inspect the Furnace Components:** If you are comfortable with basic furnace maintenance, inspect the furnace components for any signs of damage or malfunction. If you are not comfortable, call a qualified HVAC technician.
- **Check the Smoke detector/alarm:** Clean the smoke detector/alarm according to the manufacturer's instructions. If the alarm persists, consider replacing the smoke detector/alarm.

Here are some **preventative measures** you can take to minimize the risk of your **furnace triggering** the smoke detector:

- **Regular Maintenance:** Schedule regular furnace maintenance with a qualified HVAC technician. This will help ensure your furnace is operating safely and efficiently.
- **Clean Filters Regularly:** Replace or clean the air filter every 1-3 months, depending on the type of filter and your usage.
- **Keep the Area Clear:** Keep the area around the furnace clear of clutter and dust

Finally, test your **smoke detectors monthly** by pressing the test button. If the **alarm sounds**, the detector is working properly.

Replace batteries every **six months** and replace all smoke alarms every **ten years** or as recommended by the manufacturer.