

POLICY NUMBER: 26-014

SMOKE&CARBON MONOXIDE ALARMS – CIRCUIT CONNECTIONS

PURPOSE

The purpose of this policy is to ensure that life-safety devices, such as smoke detectors (SD) and carbon monoxide (CO) alarms, remain continuously powered and function as intended during normal occupancy. Connecting these alarms to the lighting circuit helps ensure early detection of fire and CO hazards, minimizes the risk of unintentional power disconnection, and enhances occupant safety within residential buildings.

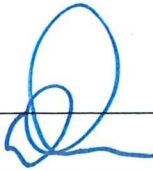
POLICY

All smoke detectors and carbon monoxide alarms shall be connected to the same lighting circuit as the entrance light(s). This configuration provides a reliable and monitored power source that cannot be inadvertently switched off without occupants noticing. Dedicated circuits for these alarms are not permitted, as they can be accidentally left de-energized for extended periods, compromising safety.

All new installations and retrofit projects involving smoke detectors and carbon monoxide alarms shall comply with this policy.

ANALYSIS

1. **Occupant Awareness:** If the circuit is interrupted or a breaker is tripped, the lights will not function, alerting occupants immediately to a power issue that may affect alarm operation.
2. **Continuous Power Supply:** Sharing the lighting circuit ensures the alarms remain energized, reducing the likelihood of alarms being unknowingly disconnected.
3. **Code Compliance:** This approach aligns with the intent of the California Electrical Code (CEC) and the California Residential Code (CRC), which require life-safety devices to have a dependable power source and to be installed in a manner ensuring reliable operation.
4. **Maintenance and Safety:** Combining alarms on a lighting circuit simplifies maintenance checks and ensures that occupants are aware of power interruptions that could affect alarm functionality.

<u>Approved:</u> David Dent <i>Deputy Director/Chief Building Official</i>	Signature: 
	Date: 3/4/22