



CODE REQUIREMENTS

General Requirements:

The approval of a building permit application and the issuance of the related building permit is based on the specific scope of work description provided on the application by the applicant. Should any of the work on a permit go beyond the initial approved scope of work, that additional work will need to comply with applicable codes. Field corrections and additional plans/construction documents may be required in this instance.

Code Requirements:

The state and local building code sections listed in this approval letter are based on the permit application scope of work. This is not an exhaustive list of building codes that may apply to this permit. Work done under this permit needs to conform to all applicable state and local codes.

Propane, Smoke and Carbon Monoxide Alarms

Mandatory Retrofit Requirements

When the valuation of an addition, alteration or repair to a Group R Occupancy exceeds \$1,000 and a permit is required or when one or more sleeping rooms are added or created in existing Group R Occupancies, smoke alarms, carbon monoxide (CO) alarms, and LPG sensors/alarms shall be installed.

➤ Smoke and Carbon Monoxide (CO) Alarms:

❖ Smoke Alarms

- **Required Locations** (2022 California Building Code 907.2.11.2 and MLFD Municipal Code):
 1. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms.
 2. In each room used for sleeping purposes.
 3. In each story within a dwelling unit, including basements but not crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.
 4. Smoke alarms should be mounted on the ceiling 4 inches from the wall, or on the wall 4 to 12 inches from the ceiling. Do not install near drafty areas such as windows. (MLFD Municipal Code)

5. See Section 907.2.11.8 for specific location requirements.
 6. Smoke alarms shall be tested and maintained in accordance with the manufacturer's instructions. Smoke alarms that no longer function shall be replaced.
- **Interconnection** (2022 CBC 907.2.11.5):
 - Smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm.
 - Exception: Smoke alarms in existing areas are not required to be interconnected where repairs or alterations do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for interconnection without the removal of interior finishes.
 - **Power Source** (2022 CBC 907.2.11.6):
 - Smoke alarms shall receive their primary power from the building wiring provided that such wiring is served from a commercial source and shall be equipped with a battery backup. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.
 - Exception: Smoke alarms are permitted to be solely battery operated in existing areas of buildings undergoing alterations and repairs that do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space, or basement available which could provide access for building wiring without the removal of interior finishes. Smoke alarms shall emit a signal when the batteries are low.

❖ **Carbon Monoxide (CO) Alarms** (2022 CBC 915.1.2, 915.1.3)

- Carbon monoxide detection shall be provided for existing buildings and new construction. Carbon monoxide detectors shall be provided in dwelling units where either or both of the following conditions exist:
 1. The dwelling unit contains a fuel-fired appliance or gas fireplace.
 2. The dwelling unit is served by a fuel-burning forced-air furnace.
 3. The dwelling unit has an attached garage with an opening that communicates with the dwelling unit.
- **Required Locations** (2022 CBC 915.2):
 1. Outside of each separate sleeping area in the immediate vicinity of the bedrooms.
 2. On every occupiable level of a dwelling unit, including basements.
 3. Carbon monoxide detection shall be installed in sleeping units where the sleeping unit or its attached bathroom contains a fuel-burning appliance or is served by a forced air furnace.
- **Interconnection** (2022 CBC 915.4.5):
 - Where more than one carbon monoxide alarm is required to be installed within an individual dwelling unit, the alarms shall be interconnected in a manner that activation of one alarm shall activate all of the alarms in the individual unit. Physical interconnection of carbon monoxide alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm.
 - Exception: Carbon Monoxide alarms in existing areas are not required to be interconnected where repairs or alterations do not result in the removal of interior

wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for interconnection without the removal of interior finishes.

○ **Power Source (2022 CBC 915.4.1):**

- Carbon monoxide alarms shall receive their primary power from the building wiring where such wiring is served from a commercial power source and, where primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection.
- Exception: Carbon monoxide alarms in Group R occupancies shall be permitted to be battery powered or plug-in with a battery backup in existing buildings where alterations and repairs do not result in the removal of interior wall and ceiling finishes exposing the structure in areas/spaces where carbon monoxide alarms are required, unless there is an attic, crawl space or basement available which could provide access for building wiring without the removal of interior finishes.

✳ **Combination smoke and carbon monoxide alarms may be used in all locations that require smoke alarms or carbon monoxide alarms.**

➤ **Propane Alarms (TOML MC 15.24.086)**

- All R Occupancies containing liquefied petroleum gas (LPG) appliances and/or LPG facilities shall be equipped with a listed LPG sensing device (sensor) attached to an audible alarm.
- A propane sensor is required at the first floor of the dwelling unit at or near the floor level. The sensor shall be connected to an alarm audible throughout the living area. Propane sensors and alarms shall be hard-wired and interconnected when the proposed ceiling and wall finishes allow for such an installation. Otherwise, plug-in type sensors are allowed. In accessible units, propane alarms shall be audible and visual.
- Propane sensors are required in the crawlspace of the dwelling at the lowest point of the crawlspace and shall be hardwired.
- An audible and visual alarm shall be installed at the exterior of the structure at or near the front of the building that faces the street. The exterior alarm shall be connected to the crawlspace propane sensor. The exterior alarm shall be either yellow or amber in color and must be mounted 17 ft above grade on a shed side or 12 ft above grade on a non-shed side.