

**CITY OF LEMOORE
2007 BUILDING AND FIRE CODE FINDINGS**

SECTION 8-1A-2 CALIFORNIA BUILDING CODE

Section 202

The definition of the words "Grade (Adjacent Ground Elevation)" is hereby added to Section 202 of said California Building Code to read as follows:

The elevation for the finished ground or surfacing adjacent to the exterior structural walls shall be at least twelve inches (12") above the highest elevation of the street curbing which fronts on or borders the lot or building site. Due to unusual terrain conditions, deviations from this requirement may be granted by the building Official. (At building site where street curbing has not been installed along the adjoining street, the City Engineer shall determine the future curb elevation as a base of establishing the grade.)

1. All on-site water must surface drain at 1% slope to City right-of-way.
2. All water shall be maintained on-site until it reaches City right-of-way.
3. If surface drainage is blocked by sidewalk or other obstruction, alternate method of drainage must be approved by the City of Lemoore before installation.

Finding: Because of our various set back requirements depending on zoning, the requirement that the 2% plus 12" from the flow line of gutter does not provide enough elevation to meet a 6" minimum clearance from finished slab to finished grade and a 1% slope from the rear property line to the street.

Section 2303.4.1.6

Trusses exceeding 24 feet in length must be attached with a minimum of A-34 hurricane ties or equivalent.

Finding: Due to the metal gang nail plate located above exterior bearing walls, carpenters struggle to adequately toe nail trusses into the tope plate at this location. Therefore, by using an H-1 or A-34 hurricane tie (or equal), we can visually see that all required nail holes have nails in them, giving us assurance that trusses are secured to exterior walls.

Section 1910.1

Vapor barrier shall also be installed under entire garage slab.

Finding: Due to our high groundwater and the presence of alkali in our soil, we require 6 mil plastic under garage slabs to minimize the permeation of alkali.

Section 1209.2

- a) Access. No access shall be provided to the attic from any private garage or carport unless an approved fire separation wall is constructed between R-3 and U-1 occupancies or approved by Building Official.

Finding: It has been our experience that home owners wishing to create undesigned storage space in their garage attics are penetrating required fire protected ceiling with non fire rated ladders. Although sections in the code address methods for protecting these types of openings, we feel that we need to be more specific.

Section 406.1.4.2

All electrical and low voltage wiring that penetrates the occupancy separation wall between a group R Division 3 and a group U occupancy shall be encased in 10 feet of metal conduit. This conduit shall extend 5 feet each side of occupancy separation wall and be draft stopped with approved material.

Finding: It is quite common in most residential construction that the main electrical panel is located on one of the garage exterior walls. This means that all non metallic electrical circuits are run from the garage attic to the residence. In homes which have unfinished walls and ceilings, a fire separation wall is required from floor to roof deck between the R-3 and the U-1 occupancies. Installing the conduit will limit the number of penetrations to one, and provide an approved method of fire penetration.

Section 609.3.1

Ferrous piping including coated galvanized piping shall not be permitted under a concrete slab resting on the ground.

Finding: Due to the corrosive minerals in our soil in various parts of our city and our visual experiences with galvanized piping deterioration, galvanized piping should only be placed where it can be readily accessible.

Section 610.0

In no case will the water service and yard supply line be smaller than one inch (1"). This applies to all types of approved piping materials.

Finding: On the average, most homes calculate to a one inch (1") service and supply, therefore, our water division only stocks a minimum one inch (1") meter for all new homes. This simplifies our inventory and eliminates the need to perform water sizing calculations for small and average size homes.

Section 604.1

The installation of Pex, Pex-Al-Pex and CPVC shall only be permitted to be installed in new residential construction with the following conditions:

- a. Only the home run method of installation from an approved manifold or manabloc system will be permitted with no inline splices.
- b. All manifolds, manablocs, valves, pressure regulators, etc. installed outside of structure shall be installed in an accessible enclosure within the stud wall cavity for easy access.
- c. Valves, manifolds, pressure regulators, etc., installed outside of structure shall be installed in an accessible enclosure.
- d. Each installer shall be certified through the manufacturer and a copy or a certificate presented to the Building Department.
- e. Contractor shall provide the Building Department a copy of a certificated stating that the contractor has installed the water piping per manufacturers and testing agency specifications and shall post a copy located at the manifold/manabloc enclosures.
- f. All water piping systems shall be sized per 2007 California Plumbing Code with ½ inch being the minimum pipe size used.
- g. No water piping shall be installed in a plenum and/or any air ducts.
- h. There shall be no splices under or within any concrete slab. Any water piping installed under any concrete slab shall be provided with a continuous sleeve to a point 6 inches above top of finished concrete and the water piping shall also be continuous from angle stop to the manifold enclosure.
- i. Contractor shall provide an I.D. tag or plate at the electrical panel stating that the water piping and water system is not bonded.
- j. No water piping shall be installed in any open areas (i.e., garage, patio, etc.) or subject to exposure of direct sunlight.
- k. All piping installed through a fire wall shall be installed within a metal sleeve and fire caulked at both ends of the penetrations.
- l. Water piping shall not be used with continuous hot water recirculating pump systems.
- m. Installer shall provide a minimum of 18 inches between the pex piping and the top of the water heater.
- n. Water piping shall not be bent to 90 degrees in a standard stud wall cavity. Installer shall provide or use an approved drop ear or rigid piping not to exceed 18 inches in length to hose bibs, water heaters and other applications requiring rigid piping. All rigid piping shall be secured within 4 inches top and bottom of the rigid piping.
- o. Contractor shall provide the Building Department with an approved crimp gauge at the time of the water piping inspection.
- p. Contractor and/or the manufacturer shall be available at time of the initial inspection.

Finding. Due to State not adopting PEX-AL-PEX and PE-AL-PE piping, we will continue to limit the use of concealed fitting as much as reasonably possible. We feel that a "Home Run" installation gives assurance that joints are limited to a readily accessible location for monitoring or repair.

SECTION 8-1E-2 – CALIFORNIA FIRE CODE

Section 103.1

The California Fire Code as adopted and amended herein shall be enforced by the bureau of fire prevention (*or other designated agency*) in the fire department of the City of Lemoore, which is hereby established and which shall be operated under the supervision of the chief of the fire department.

Fire prevention duties are performed by the Building Inspection Department as Fire Department has no full time employees.

Section 103.2

To specify *“the chief of the fire department”* and to specify *“the City Council of the City of Lemoore”* to hire technical inspectors, who, when such authorization is made, shall be selected through an examination to determine their fitness for the position. The examination shall be open to member and nonmembers of the Fire Department, and appointment made after examination shall be an indefinite term with removal only for cause.

Section 103.3

To add *“the chief (or fire marshal) in charge of the bureau of fire prevention (or other designated agency) shall be appointed by the City Council.”*

Section 3004

To change from “established by law” to “designated and approved by the Fire Marshal”.

Provides for Fire Marshal approval of location of CNG Facilities as they become more prevalent.

Section 3301

To change from “established by law” to “designated and approved by the Fire Marshal.”

Allows the Fire Marshal to approve location of fireworks due to Volunteer Fire Department.

Section 2206.2

To add *“establishment of limits of districts in which storage of flammable or combustible liquids in outside aboveground tanks is prohibited,”* and change from “established by law” to *“as designated and approved by the Fire Marshal.”*

To provide for above ground tanks due to high groundwater when approved by the Fire Marshal.

Section 3404.2.9.5.1

To add “*outside buildings*” and to change from “established by law as the limits of districts in which such storage is prohibited” to read “*as designated and approved by the Fire Marshal.*”

To provide for above ground tanks due to high groundwater when approved by the Fire Marshal.

Section 8-1E-4

Requirements for Automatic Fire Extinguishing or Sprinkler Systems

Group A, B, E, F, H, I, M, R-3 (townhouse) and S Occupancies: Regardless of any provision as set forth in the California Building Code, the installation of automatic sprinklers or an automatic fire extinguishing system shall be required in all Group A, B, E, F, H, I, M, R-3 (townhouse) and S Occupancies more than two stories in height or with a gross floor area greater than five thousand square feet, and R-3 townhouses when built larger than two living units, unless such occupancies are exempt or more restrictive from said requirements through other codes.

Findings: Size of City physical obstacles such as railroad tracks, State Highway 41 and 198 and the Lemoore Canal pose potential delays in Fire Department response time. Due to the delays posed by these barriers and until additional stations are available, we will require all structures over 5,000 square feet, which do not already require sprinklers, and townhouses when built larger than two living units to have sprinklers. Sprinkler installation will follow the Uniform Fire Code for design for same type of structure with greater square footage.