

SECTION 2

GENERAL REQUIREMENTS FOR SINGLE FAMILY DWELLINGS

GENERAL. All residential construction in Sonoma County must meet the minimum requirements of the **2010 CALIFORNIA BUILDING CODE (2009 INTERNATIONAL BUILDING CODE** as amended by the state) or the **2010 CALIFORNIA RESIDENTIAL CODE (2009 INTERNATIONAL RESIDENTIAL CODE** as amended by the state) plus amendments adopted for Sonoma County. Detailed discussions of various components and systems follow in Sections 3 through 21.

ENERGY COMPLIANCE: Section 3

FIRE SAFE STANDARDS: Section 4

STRUCTURAL COMPONENTS AND BUILDING FINISHES: Sections 6-13

PLUMBING AND SANITARY FACILITIES: Section 14-15

MECHANICAL AND ELECTRICAL SYSTEMS: Section 16-17

MISCELLANEOUS COMPONENTS: Section 18

CONSTRUCTION IN FLOODZONES: Section 19

CONVENTIONAL (NON-ENGINEERED) CONSTRUCTION: Section 20

CALIFORNIA RESIDENTIAL CODE: Section 21

CONVENTIONAL CONSTRUCTION. All non-engineered structural systems shall be designed and built in compliance with CBC Chapter 23 Section 2308 - Conventional Light-Frame Construction, or CRC Chapters 3-9. When portions of a building of otherwise conventional construction exceed the limits of CBC Section 2308.2 or CRC Section R301, these portions and the supporting load path shall be designed in accordance with accepted engineering practice and the provisions of the CBC. The term "portions" shall mean parts of buildings containing volume and area such as a room or a series of rooms. Any structural system components that do not meet conventional construction criteria must be designed by an Architect or Engineer licensed in the State of California. The portions of the plans and the design calculations prepared by the architect or engineer must be stamped and signed in accordance with the provisions of the state business and professions code ("wet stamp and signature").

For a more in-depth discussion of what constitutes "Conventional Construction" see Sections 20 and 21 of this manual or CBC Chapter 23 Section 2308 or CRC Section R301.

MINIMUM REQUIREMENTS FOR HABITABLE SPACE:

ESCAPE OR RESCUE WINDOWS. - Every sleeping room and any basement must have at least one openable window or door approved for emergency rescue with a minimum net clear opening of 5.7 square feet, except that windows at the grade floor shall have a minimum net opening of 5 square feet.

The minimum net clear opening height dimension shall be 24". The minimum net clear opening width dimension shall be 20". The bottom of the clear opening shall be no more than 44" from the floor.

FIRE SPRINKLERS. New single family dwellings must be provided with automatic fire sprinkler systems. Additions not meeting the exceptions in the following table shall be provided with fire sprinkler systems:

Existing Building Area	Allowable Area Increase
0 - 1000 ft ²	200% (C)
1001 - 4000 ft ²	100% (A and C)
≥4001 ft ²	50% (A, B and C)

- (A) A 2000 sq. ft. maximum increase is allowed.
- (B) Maximum cumulative allowable area is 6000 sq. ft.
- (C) Maximum addition to Limited Density Owner Built Rural Dwellings (as described in Sonoma County Code Chapter 7-A) is 640 sq. ft.

SMOKE ALARMS. Smoke alarms are required in all sleeping rooms and on the ceiling or wall outside of each separate sleeping room within 21 feet of the door, the distance to be measured along the path of travel. When the dwelling unit has more than one story and in dwellings with basements, a smoke alarm shall be installed on each story and in the basement. Smoke alarms are also required to be installed when any alteration or repair exceeds \$1,000, and a permit is required. If the alteration is less than \$1,000, but a sleeping area is added or created, a smoke alarm is required.

CARBON MONOXIDE ALARMS. For new construction an approved carbon monoxide alarm shall be installed in dwelling units and in sleeping units within which fuel burning appliances are installed; and in dwelling units that have attached garages. Carbon Monoxide alarms are also required to be installed when any alteration or repair exceeds \$1,000, and a permit is required.

LIGHT AND VENTILATION. Every space intended for human occupancy shall be provided with natural light by means of exterior glazed openings or shall be provided with artificial light. Spaces intended for human occupancy are spaces designed for living, sleeping, eating or cooking. Bathrooms, closets, halls, storage and utility spaces are not included. Natural ventilation of an occupied space shall be through windows, doors, louvers, or other openings to the outdoors. Such openings shall be provided with ready access or shall otherwise be readily controllable by the building occupants.

The minimum net glazed area for natural light shall be not less than 8 percent of the floor area of the room served, or artificial light shall be provided that is adequate to provide an average illumination of 10 foot-candles over the area of the room at a height of 30 inches.

Stairways within dwelling units and exterior stairways serving a dwelling unit shall have an illumination level on tread runs of not less than 1 foot-candle.

The minimum openable area to the outdoors shall be 4 percent of the floor area being ventilated.

Rooms containing bathtubs, showers, spas and similar bathing fixtures shall be mechanically ventilated. Rooms containing a water closet shall have an exhaust fan with a minimum rating of 50 cfm.

CEILING HEIGHTS AND FLOOR AREA . Habitable rooms and corridors shall have a ceiling height of not less than 7' 6". Bathrooms, kitchens, storage rooms and laundry rooms shall have a ceiling height of not less than 7' measured to the lowest projection from the ceiling.

Habitable spaces other than kitchens shall not be less than 7 feet in any plan dimension. Kitchens shall have a clear passageway of not less than 3 feet between counter fronts and appliances or counter fronts and walls. At least one habitable room in the dwelling must have a floor area of at least 120 square feet. The minimum required floor area for a habitable room is 70 square feet, except that kitchens shall have not less than 50 square feet of gross floor area.

If any room in a building has a sloping ceiling, the prescribed ceiling height for the room is required in only one-half the area thereof. No portion of the room measuring less than 5' from the finished floor to the finished ceiling shall be included in any computation of the minimum area thereof.

If any room has a dropped or furred ceiling, the prescribed ceiling height is required in two-thirds the area thereof, but in no case shall the height of the furred ceiling be less than 7'.

For CRC requirements see section 21 of this manual.

PLUMBING FIXTURES. Each building shall be provided with sanitary facilities. In a single family dwelling a water closet, lavatory, and a bathtub or shower are required. There must be a kitchen equipped with a kitchen sink.

HEATING. Dwelling units shall be provided with heating facilities capable of maintaining a room temperature of 68 F at a point 3' above the floor in all habitable rooms.

EXTERIOR WALL OPENINGS. For group U and R-3 occupancies the exterior walls shall not be required to be fire-protected and the area of openings shall be unlimited if the distance from the exterior wall to a property line (or assumed property line between structures) is 5 feet or more. For group U and R-3 occupancies no openings are permitted from 0 to 3 feet from a property line. At a distance between 3 to 5 feet from a property line an exterior wall of a group U is permitted to have protected openings for up to 15% of the wall area, with group R-3 occupancies allowed a maximum of 25% total protected and unprotected openings of the wall area. Always verify with the planning department actual required property line setback requirements for the particular parcel to be built upon. For exterior wall fire-resistant construction requirements under the provisions of the CRC see Section 21 or this manual. For parcels 1 acre and larger see Section 4 (Fire Safe Standards) for property line setback requirements.