



**California Department of Forestry and Fire Protection  
Butte County Fire Department  
Fire Prevention Bureau**

176 Nelson Avenue, Oroville, CA 95965  
(530) 538-7888 Office, (530) 538-2105 Fax

**Building Permit # \_\_\_\_\_ - \_\_\_\_\_**

**Fire Flow Requirements for Residential Structures**

To confirm compliance with fire safe requirements, the Butte County Fire Department will be performing a review of your building permit for fire flow or fire sprinkler requirements.

Under the authority of the 2007 California Fire Code, the following residential fire flow or fire sprinkler requirements shall be required for all new residential development located within the unincorporated areas of Butte County.

All new residential structures are required to meet the following fire flow or fire sprinkler requirements:

- The minimum fire-flow requirements for one and two family dwellings having a fire-flow calculation area which does not exceed 3,600 square feet shall be 1,000 gallons per minute for a two hour flow duration. The hydrant distance will be 500 feet or 1000 feet from the dwelling depending on the local fire response.**
- The minimum fire-flow requirements for one and two family dwellings having a fire-flow calculation area in excess of 3,600 square feet shall not be less than that specified in Table B105.1.**

**Table B105.1 requires \_\_\_\_\_ gallons per minute fire flow for \_\_\_\_\_ hour flow duration.**

**Exception:**

- A reduction in required fire flow of 100 percent, as approved by the fire chief (CFC B103.1), is allowed when the building is provided with an approved automatic sprinkler system.**

**Fire sprinklers are not required for the following:**

- Residential accessory buildings (detached garages, sheds, carports, etc.)
- Temporary residential structures (must have an issued building permit for a permanent dwelling within 6 months).  
*This does not include temporary second dwellings (Aunt Minnie's).*

Sprinkler installation shall be in accordance with the 2002 National Fire Protection Association (NFPA) 13D or 13R (depending on the size of the home), standard for the installation of sprinkler systems in one and two family dwellings and manufactured homes and 2007 California Fire Code Chapter 9. Applicants are required to consult with a California State Contractors Licensing Board C-16 certified contractor or a California State Fire Marshal certified Automatic Systems "A" licensed contractor for sprinkler system engineering, design, calculations and installation (see the yellow pages under Sprinklers, Automatic Fire).

A separate building permit from the Butte County Department of Development Services -Building Division for the fire sprinkler system will be required to be submitted and approved prior to the issuance of the permit for the residence.

NOTE: Fire flows shall come from a pressurized water system. A pressurized water system is defined as any public, mutual locally formed or private water system jurisdiction having water capable of adequately supplying fire hydrants. Use of a private water system for fire protection purposes will require one of the following acceptable entities to maintain the system: 1) formation of a Mutual Water Company, 2) formation of a new County Service Area, or 3) annexation into an existing County Service Area. (2002 Butte County Improvement Standards).

All of the Fire Safe Requirements are posted on the Butte County Fire Department website at  
<http://www.buttecounty.net/Fire/Fire%20Prevention/Building%20Information.aspx>

Check the status of your permit online at  
[http://dspermits.buttecounty.net/etrakit/Permit\\_Search.asp](http://dspermits.buttecounty.net/etrakit/Permit_Search.asp)

Need a fire department inspection? Call our inspection line. (530) 538-6226



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**Residential Fire Sprinkler Requirements**

Contact Butte County Department of Development Services -Building Division for a residential fire sprinkler permit.

Residential sprinklers have the potential to reduce fire death and property loss attributable to fire. Recognizing the rural nature of Butte County and the fact that the vast majority of residences in the county rely on private wells for domestic water, the Butte County Fire Department has established the following modifications to the currently referenced edition of NFPA 13D Standards for the installation of residential fire sprinklers in residences with private wells:

1. Residential fire sprinklers must be installed by a C-16 contractor or in accordance with California Business and Professions Code 7026.12.
2. A local water flow alarm shall be provided on all fire sprinkler systems. This shall apply to all fire sprinkler installations including those connected to community water systems. The alarm shall be audible through out the building.
3. Domestic water wells and fire system booster pumps shall be wired to provide for separate exclusive electrical circuits for each pump.
4. Water supplies from well water systems with holding or pressure tanks shall be operated by both a water flow switch and a pressure switch to activate the booster pump.
5. A holding tank system which combines both domestic and fire sprinkler water shall be configured by the following means:
  - A. A water storage tank of 2,500 gallons or more shall be required when a single water lateral is used for both domestic and fire sprinkler water.
  - B. If the water storage tank is less than 2,500 gallons, the water storage tank shall be tapped above the 500 gallon level for the domestic water supply. The bottom tank tap shall be reserved for the sprinkler water supply and shall be two (2) inches minimum above the bottom of the tank.
  - C. The fire sprinkler system shall be configured so the fire sprinkler system cannot be shut off independently from the domestic water system.
  - D. All water storage tanks shall be placed on a concrete pad.
6. Fire sprinkler only tanks shall be 500 gallons minimum in size and shall operate at the designed pressure for 10 minutes.
7. Triple pressure-tank systems are allowed if the water source (well) is capable of producing at least 30 GPM.

8. Sprinkler spray patterns shall not be obstructed.
9. All systems shall be hydrostatically tested at not less than operating pressure for ten (10) minutes. There shall be no visible leaks or loss of pressure during this test. Installation contractor shall provide written, signed, and dated documentation that this test took place and passed per the requirements. **This test is the responsibility of the installation contractor.**
10. All exterior piping shall be insulated to prevent freezing.
11. All attached garages shall be sprinklered.
12. A furnace or water heater installed in the attic shall be provided with sprinkler protection.
13. The sprinkler contractor shall provide the property owner with maintenance information as described in NFPA 13D or 13R. It shall then become the property owner's obligation to maintain the system.
14. The sprinkler system shall be tested monthly by opening the inspection test valve and flushing for two (2) minutes to insure activation of all system components including bell, flow switch, pump, etc.
15. The inspector test valve shall be easily accessible (behind a hinged door on the exterior of the home) to the home owner and inspector and located down stream from the flow switch, near the end of the system, to insure the system can be easily flushed during the monthly test.
16. If NFPA 13D Standards and local standards conflict, the local standards shall prevail.
17. The above mentioned system must be fully operational and permanent power must be connected at time of inspection.

\_\_\_\_\_  
**Inspector**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Property Owner or Contractors Signature**

\_\_\_\_\_  
**APN**

\_\_\_\_\_  
**Print Name**