



WOODSIDE FIRE PROTECTION DISTRICT

Fire Hydrant Water Supply

Design /Installation Requirements

808 Portola Rd. #C Portola Valley, CA 94028 Fire Prevention 650-423-1405 Fax 650-851-3960

January 2020

Labeling

All signage, labels and placards will be; RED SIGN WITH WHITE LETTERS or as approved by the fire code official.

One and Two-Family Dwellings:

2019 CFC appendix B including amendments adopted in Woodside Fire Protection District's Ordinance #12.

SECTION B105.1 FIRE FLOW REQUIREMENTS FOR BUILDINGS

B105.1 One-and Two-Family Dwellings.

The minimum fire flow shall be 1000 gallons per minute for structures 3601 square feet and greater and 750 gallons per minute for structures 1-3600 square feet. A water supply for fire protection shall mean a fire hydrant within 600 feet from the building, measured via an approved roadway/driveway, capable of the required fire flow and psi. There shall be no exemption for an installed fire sprinkler system.

***Distance from hydrant to structure shall be measured via an approved roadway in which the engine can safely drive from the hydrant to front door of structure.*

Where a public or private water main is not within 1000 feet of the required fire hydrant location, or the water company cannot provide 1000 gpm @ 20 psi, NFPA 1142 Standard on Water Supplies for Suburban and Rural Fire Fighting 2017 Edition will be adhered to for fire flow requirements as an alternate means.

Draft Hydrants Requirements:

When using a drafting hydrant based on 1142 requirements, connected to a swimming pool or tank, the following requirements must be complied with and shown on plans:

PLANS TO INCLUDE:

- Square footage of largest structure.
- Water source and capacity in gallons.
- Elevation between fire department connection/hydrant and bottom of water source. (*Elevation of fire dept. connection not to exceed 15 feet above bottom of water source*)
- Distance from pipe connection from water source to fire department connection/hydrant.
- Calculations indicating fire flow, including pipe size, bends, elevation and distance.
- Piping to include kick blocks (24"x24") @ each bend and constructed of materials that will withstand corrosion and electrolysis.
- Height of the fire department connection/hydrant which shall be 3 feet off the ground.
- Location of the fire department connection/hydrant which shall be field approved by WFPD.
- Fire dept. connection will include minimum of male 4 ½", national standard thread and cap.
- If fire dept connection is a hydrant, specify Clow 960 wet barrel with (1) - 4 1/2" and (2) - 2 1/2" outlets.

Land Divisions and Subdivisions:

The minimum fire flow shall be 1000 gallons per minute at 20 p.s.i. residual. Fire hydrants need be 600 feet apart and within 600 feet from proposed or existing structures via an approved roadway/driveway.

Water mains and hydrants shall meet American Water Works Standards. 6" water main minimum. Systems should be engineered to establish the correct fire flow capacity. All fire flow capacities (gpm) and psi should be show on plans.

General:

All new fire hydrants shall be steamer type CLOW 960 wet barrel, having at least (1)- 4 ½” outlet and (2)-2 ½” outlets, all having national standard threads.

Woodside Fire Protection District shall approve all fire hydrant locations.

Hydrants shall be 600 feet from structures and shall be measured on an approved roadway/driveway in which the engine can safely drive.

PLANS SHALL SHOW DISTANCE OF NEAREST FIRE HYDRANT

HYDRANT NEEDS TO BE OPERABLE PRIOR TO ROUGH FRAMING!

SPECIAL REQUIREMENTS:

- Woodside Fire Protection District can provide a blue dot to indicate the location of the fire department connection/hydrant.
- Location of the fire department connection/hydrant which shall be field approved by WFPD.
- Draft system is required to be tested by Woodside Fire Protection District upon completion of installation. Final permit approval and occupancy will not be given until system has been inspected and tested.
- Fire dept. connection will include minimum of male 4 ½”, national standard thread and cap.
- If fire dept connection is a hydrant specify Clow 960 wet barrel with (1) -4 1/2” and (2)– 2 1/2” outlets.

Submittal

Woodside Fire Protection District requires plans to be submitted for new fire hydrant water supplies. Plans will be reviewed and approved by Woodside Fire Prevention Bureau. Along with the submittal package a \$215.00 (Plan review/inspection fee) will be required. *Checks payable to Woodside Fire Protection District*

****NOTE****

If your project is under review through County of San Mateo Planning and Building Departments. Fees for your project need to be directly paid to WFPD prior to plan approval.

Each project is unique and additional requirements may be enforced as deemed appropriate.