



COSUMNES COMMUNITY SERVICES DISTRICT

FIRE DEPARTMENT

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CosumnesCSD.gov/Fire

FIRE PREVENTION CONSTRUCTION STANDARDS SINGLE-FAMILY DWELLING PLAN SUBMITTAL REQUIREMENTS

Standard Number: FPCS-1012

Original Effective Date: 4/16/2020

Revision Date: 3/25/2022

Code Section: 2022 California Fire Code

STANDARD

1012.1 Cosumnes Fire Department's jurisdiction over single-family residential homes relates to fire access, fire flow, and fire sprinklers only. "Fire access" relates to our ability to get fire apparatus close enough to a home to reach it with our fire hose and equipment. "Fire flow" relates to our access to a fire hydrant that provides enough gallons per minute (GPM) to suppress a fire. All of the following requirements are taken from the 2022 California Fire Code (CFC), local fire code ordinance, and Cosumnes Fire Department Standards.

PURPOSE AND SCOPE

1012.2 The purpose of this standard is to provide homeowners and contractors the information necessary to obtain plan review and final inspection approval for single-family homes.

APPLICATION

1012.3 Definitions

- a. Fire Apparatus Access Road – A paved road, lane, street, or driveway that provides fire apparatus immediate access to a building.
- b. 150-Foot Hose Reach – 150 feet is the maximum distance permitted from a point of fire access to all exterior portions of a building as measured by an approved route around the exterior of the building.
- c. Fire Access Agreement – An agreement of use between parcels served by a common private driveway, street, or road that is not maintained by the city or county.



- d. Fire Apparatus Turnaround – A location with specific minimum dimensions designated for use by fire apparatus to turn around. No parking is permitted in a designated fire apparatus turnaround.
- e. Fire Access Roadway Maintenance Agreement – An agreement between parcel owners specifying how, who, and when maintenance of the common private street or road will be conducted and enforced.
- f. Fire Department Permit – Commonly referred to as “Red Card”. This permit is your fire department approval to begin construction (upon issuance of a permit from the building department). This document shall be available at the job site for fire inspectors to sign and date as requirements are satisfactorily inspected. This permit serves as proof to the building inspector of fire department final approval. The building department will then in turn issue a Certificate of Occupancy, which authorizes use of the building.
- g. Fire Flow – A prescribe amount of water required by the fire code to be available to provide fire suppression for a structure. Fire flow is normally provided by a public fire hydrant or an approved onsite water storage tank.
- h. NFPA 13D – National Fire Protection Association, Standard 13D, Standard for Installation of Sprinkler Systems in One- and Two-Family Dwellings.
- i. Private Driveway – Located on the same parcel as the homes served and used exclusively for that parcel.
- j. Private Road/Street – A road not maintained by a city or county agency that allows public/owners access to one or more parcels.
- k. Public Road/Street – A road maintained by a city or county agency that allows public access to one or more parcels.
- l. Residential Fire Sprinklers – A fire sprinkler system installed in the building designed specifically for homes and residential accessory structures that control a fire in its early stages.
- m. Permit Release Letter – A letter issued to the applicant by the fire department along with the fire department approved plans and permit. The building department will not issue a building permit until this letter is provided to the building department by the applicant.



- n. Public Water Supply - Domestic use water that supplies the residence as well as fire hydrants near the home and provided by a water agency.

CONSTRUCTION REQUIREMENTS

1012.4 All new homes (R-3) are required to be provided with automatic fire sprinklers installed in accordance with NFPA 13D. This is a statewide requirement found in the California Residential Code (CRC R313).

- a. Accessory Dwelling Units (ADU) meeting the requirements found in the link below may be exempt from fire sprinklers if adequate fire flow is provided. If fire flow does not meet minimum California Fire Code requirements, fire sprinklers may be required.
<https://osfm.fire.ca.gov/media/q1xg3mud/ib-accessory-dwelling-units-final.pdf>
- b. A fire sprinkler system shall be installed in new manufactured homes (HSC Sections 18007 and 18009) and multifamily manufactured homes with two dwelling units (HSC 18008.7) in accordance with Title 25 of the California Code of Regulations (Cosumnes Fire Code Ordinance).
- c. Detached accessory structures classified as "U" occupancies, such as detached garages and carports that are not within 6 feet of a fire sprinklered building, are not required to be fire sprinklered. The building department assigns the occupancy type. Fire department access requirements apply.
- d. Accessory structures such as pool houses, cabanas, guest/in-law quarters, exercise/recreation buildings, etc. are classified as accessory to "R-3" occupancies and are required to have fire sprinklers. The building department assigns the occupancy type. Fire department access requirements apply.
- e. Existing homes doing an addition shall provide the required water fire flow based on the new square footage of the home for firefighting operations. Homes located in the rural area (no fire hydrants) or homes located where the existing fire hydrant system cannot supply the minimum fire flow requirements may be required to provide fire sprinklers (CFC 507.1).
- f. Gates across driveways, streets, or roads shall meet the minimum requirements of the CFC and the Cosumnes Fire Department Gates and Barriers Standard for fire department access. Permits required. (CFC 503.4 and 503.0).



<https://www.yourcsd.com/DocumentCenter/View/23164/Emergency-Access-Gates-and-Barriers-PDF>

- g. All exterior walls shall be within 150 feet of a point of fire department access that meets Cosumnes Fire Department Fire Apparatus Access Standard. Homes which cannot comply with the 150-foot hose reach requirement as measured from the public street shall be designed to provide on-site fire apparatus access which in turn meets the 150-foot hose reach requirement (CFC 503).
<https://www.yourcsd.com/DocumentCenter/View/19004/Fire-Apparatus-Access-Standard-PDF>
- h. Each single-family residential home, including parcels with more than one dwelling, shall obtain an assigned address from the City for each home on the parcel.
- i. Home address shall be illuminated at night, internally or externally, and visible from the public street and the access driveway. If set back too far, a noncombustible rural address marker shall be located at the private driveway entrance, and possibly from the private street or road leading up to the driveway. Address signs shall be visible at night from both approach directions from the public street. Rural address shall be illuminated and or reflective (CFC 505.1).
- j. Homes/parcels that require a Fire Access Agreement shall also provide Fire Access Roadway Maintenance Agreement (RMA) between Cosumnes Community Services District and all parcels connected to and served by the fire access roadway. Fire Access Roadway Maintenance Agreement shall be on the form provided by the District and recorded with the Sacramento County Recorder. The roadway maintenance agreement shall include the following:
 - 1. Provisions for the necessary repair and maintenance of the roadway surface.
 - 2. Removal of vegetation overgrowing the roadway and infringing on the roadway clear vertical height of thirteen feet six inches (13'6") or width of twenty feet (20').
 - 3. Provisions for the maintenance, repair, and/or replacement of NO PARKING-FIRE LANE signage or striping.
 - 4. Provisions for the necessary repair and maintenance of vehicle and pedestrian access gates and opening systems.



1012.5 Fire Department Access Guidelines

Fire apparatus access shall meet the minimum standards as outlined in the Fire Apparatus Access Standard. Submitted plans shall show the following design information.

<https://www.yourcsd.com/DocumentCenter/View/19004/Fire-Apparatus-Access-Standard-PDF>

- a. Driveway shall be capable of supporting 80,000 pounds gross vehicle weight in all weather conditions.
- b. Driveway shall be designed by an engineer to ensure adequate support for emergency apparatus is provided. Provide design engineers letter outlining the required design or provide engineers stamp on plans which clearly shows design parameters to meet fire access requirements. Be sure to note the following:
 1. Surface material, e.g., concrete, asphalt, pavers, gravel, etc.
 2. Sub-base material and depth.
 3. Compaction rate or other soil treatment necessary.
- c. Design the fire access driveway and aprons to have a turning radius of 25 feet inside and 50 feet outside radius and 25 feet wide through the turn. Show radius on plans.
- d. Required fire department turnarounds shall be designed in accordance with the Cosumnes Fire Department access standard.
- e. Fire apparatus shall not encounter curbs, a change in grade, or a change in the angle of approach that would hinder, prohibit, or reduce access to the property.
- f. Minimum unobstructed width of the driveway shall be 16 feet for two or less homes. For more than two homes the width shall be a minimum of 20 feet. Provide dimensions of driveway on plans.
- g. Minimum unobstructed vertical clearance is 13 feet 6 inches.
- h. The slope of roadways or private driveways shall not exceed 10%.



- i. The angle of approach and angle of departure for roadways or driveways shall not exceed eight degrees.

DEFERRED PLANS/ADDITIONAL INFORMATION SUBMITTAL REQUIREMENTS

1012.6 List on the cover sheet or site plan the following required deferred submittals, as applicable.

- a. Fire sprinkler plan submitted by installing C-16 fire sprinkler contractor.
- b. A well and pump performance test report. This report is required to be submitted to verify the well and pump and can support the fire sprinkler design for homes not supplied by public water.
- c. Gates across fire apparatus access roads. Gates such as those used for neighborhood gates or gates across private drives and driveways require a separate submittal and permit prior to installation.
- d. Installation of new propane tank(s) or relocation of a tank. Tank(s) require a separate submittal and permit.
- e. Roof mounted solar systems. Please see solar submittal guidelines for systems less than 10kW with battery backup power.
<https://www.yourcsd.com/DocumentCenter/View/21755/Residential-Solar-Submittal-Guideline-PDF>
- f. Roof mounted or ground mounted solar systems more than 10kW with or without battery backup power.
- g. Detached garages, carports, storage buildings, pool houses and similar structures.
- h. Engineers report showing compliance with driveway/roadway design to support 80,000 pounds gross vehicle weight in all weather conditions.

PLAN SUBMITTAL REQUIREMENTS

1012.7 Building architectural plan, site plan, and application shall be submitted electronically through the District's online [portal](#). Fees may be paid with a credit card in the portal at the time of submission, or by mailed check. Permit applications are not reviewed until fees are paid.

To learn more about how to submit plans and pay fees, please visit our website www.cosumnescsd.gov/303.



1012.8 Plan submittals shall contain at a minimum the following information for review:

- a. Complete online application in the portal and pay fees.
- b. Upload plans that contain sufficient detail for the reviewer to assess the project. Submit the same plans to the fire department that were submitted to the building department.
- c. Plans shall indicate what codes the project is designed.
- d. Plans shall be scaled.
- e. Plans shall list the deferred submittal requirements such as but not limited to propane tanks, fire sprinkler plans, and vehicle gates.
- f. Plans shall have the project address and owner's name and phone number.
- g. Plans shall have a north direction arrow.
- h. Plans shall provide a "scope of work" statement.
- i. Plans shall show the location of all existing and proposed gates.
- j. Plans shall show the location of the illuminated address on the structures(s) facing the assigned street.
- k. Plans shall show the location of the rural address marker, if required.
- l. Plans shall show the location of the on-site domestic well or, if on public water, the nearest fire hydrant.
- m. Plans shall be accompanied by a well test performance report and pump curve.
- n. Plans shall indicate the occupancy classification of all structures as assigned by the Building Official and as defined by the California Building Code.
- o. Plans shall indicate the square footage of the new or existing home, new addition, garage, and porch patios separately and then totaled for a final project square footage.



- p. Plans shall show the footprint of the proposed home or building, adjacent structures, breezeways, porch patios, and the like.
- q. Plans shall show all buildings on the property.
- r. Plans submittal shall include an engineering report showing compliance with driveway/roadway design to support 80,000 pounds gross vehicle weight in all weather conditions.
- s. Plans shall show fire access design requirements for driveways meeting the Cosumnes Fire Department Apparatus Access Standard.
- t. Plans shall show the public/private road that provides access to the parcel.

DEADLINES FOR FIRE DEPARTMENT COMPLIANCE

- 1012.9 Required fire lanes shall be installed prior to any combustible construction being placed on site. This is required so that the fire department can access the site for fire and medical emergencies that occur during construction and thereafter.
- 1012.10 Required fire sprinkler systems shall be installed, inspected, and tested prior to the building department framing inspection.
- 1012.11 Required street signage and/or address numbers shall be installed as soon as work begins on site. This is to assist the fire department in locating the home in event of a fire or medical emergency during construction. This requirement may be met with approved temporary signs until the permanent signs/numbers are installed.

FIRE DEPARTMENT INSPECTIONS

- 1012.12 Two fire department inspections are required: one fire sprinkler hydrostatic/visual inspection at the framing stage and a "final" inspection when the home is complete. The building department will not issue a Certificate of Occupancy or allow occupants to move in until the fire department has approved the "final" inspection. To request an inspection, use our [online form](#).

References

- 1012.13 2022 California Fire Code