

2.16 Submittal Guidelines for Fire Department Access & Fire Flow Approval (2025)

Reference: 2025 SFFC Sections 503, 504, 507, Appendix B, BB, C, & CC; 2024 NFPA 14; 2025 NFPA 13, DBI Information Sheet EG-02

Purpose: The purpose of developing comprehensive guidelines is to provide consistent methods to assist designers in the submittal requirements for review by the SFFD for new buildings and the expansion of the area or height of buildings, regardless of occupancy classification. The San Francisco Fire Department will review these submittals to assure apparatus access and to verify that water supplies are sufficient for required firefighting per the SFFC and NFPA 14.

Scope: The guidelines in this administrative bulletin shall apply to all structures in the City and County of San Francisco.

Requirements for Approval: Prior to the approval of site permits, construction permits for new buildings, or construction permits for the expansion of the building's area or height, building owners/developers are required to verify that access and fire flow to the building site meet the San Francisco Fire Code requirements. On a case by case basis, the Fire Code Official may require some or all of the following requirements in this bulletin for specific or unique buildings, even if the building is not new or expanding.

All new and remodeled R-3 occupancies shall be required to be reviewed by SFFD for fire department access and fire flow requirements, as applicable. An SFFD stamp shall be placed on those permits, indicating:

"Plan Review By SFFD Limited To:

1. Fire Department Access
2. Fire Flow Requirements"

No other review by SFFD is required for R-3 occupancies (R-3 occupancies are not under the SFFD jurisdiction). See DBI Information Sheet EG-02 for specific fire department access requirements.

<https://www.sf.gov/resource--2022--information-sheets-dbi>

If plans are submitted separately for approval, a fee based on two hours of inspection time shall be submitted by check payable to the SFFD for review. Additional fees may be charged at an hourly rate for review and/or meetings for more complex projects. Plans and payment shall be submitted to the Bureau of Fire Prevention's Plan Check Section.

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I. GENERAL REQUIREMENTS (THE FOLLOWING ITEMS SHALL BE INCLUDED AS APPLICABLE)

1. **Scale and Documentation.** When permit plans are submitted for site or architectural permits incorporating fire department access and fire flow, the plans shall be drawn to an indicated scale (not smaller than 1/8" = 1') with a graphic scale indication. All fonts on all sheets shall be a minimum 1/8" font size. All plans shall be of uniform size (11" x 17" minimum), with a plan of each floor. Plans must be clear with legible text and symbols so they could be electronically scanned. For Electronic Plan Review (EPR) via Bluebeam: The applicant shall follow all DBI specific requirements for EPR submission and shall provide all the required information included in this section in electronic format. The requirements of this bulletin shall apply to both paper plans and EPR submittals.
2. **Building Information.** Show the location, type of construction for all proposed buildings, total square footage of all floors, and identify the building(s) as new, relocated, or existing. Building heights and setbacks from street frontage shall be included. Include the occupancy classification(s) for all proposed buildings.
3. **Streets.** The following information shall apply to streets:
 - A. **Street Location.** Show the location of all streets (both public and private streets) within a one block radius and identify them as either one or two-way traffic.
 - B. **Sidewalk and Parking.** All streets shown on the plan shall include street (curb to curb) and sidewalk widths and indicate whether parking will be allowed on one or both sides.
 - C. **Approach, Departure, Grade.** Indicate approach, departure and grade of all streets.
 - D. **Fire Department Access Roads.** The following information shall apply for fire department access roads:
 - (1) **Dead Ends.** Dead end fire department access roads in excess of 150 feet shall include a turnaround with dimensions sized per SFFC Section 503.
 - (2) **"No Parking".** For streets where no parking will be allowed due to inadequate width, details shall be included to indicate how the streets will be marked "NO PARKING", i.e. curbs painted red, striped "fire lanes", signage (include sign layout and distance between signs).
4. **Hydrants.** The following information shall apply for hydrants:
 - A. **Hydrant Location.** Show the location of all low pressure fire hydrants both public and private and include the water main and lateral feed sizes. Hydrant locations shall be based on the requirements of CFC Appendix C.
 - B. **Additional Hydrants.** Fire hydrants may be required on both sides of high traffic, multi-lane streets or streets with medians or tracks installed.

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- C. **Minimum Flow for Hydrants.** The minimum required flow requirements for fire hydrants added to an existing main is 1500 GPM @ 20 PSI residual for one hydrant or 1000 GPM @ 20 PSI each for multiple hydrants.
5. **Fire Flow and Sprinklers.** The following information shall apply for fire flow and sprinklers:
- A. **Water Flow Request.** Included in the drawings shall be a processed water flow request.
- B. **Fire Flow Calculations.** Include fire flow calculation in the drawings, wet stamped and signed by a mechanical engineer, an architect, or a C-16 contractor. Provide fire flow calculations per CFC Section 507 and Appendix. The processed water flow request form shall be included with also the supply demand graph showing the available fire flow at 20 psi residual pressure.
- C. **Identify Sprinklers.** Identify fire sprinkler protection for all buildings (“non-sprinklered”, “partially sprinklered”, or “fully sprinklered”) and, if applicable, indicate the NFPA standard the system is designed to (NFPA 13, NFPA 13R, or NFPA 13D).
- D. **Sprinkler System Information.** If the building will have a new sprinkler system or if the Fire Code Official requires additional information for the existing sprinkler system, the following shall apply on the site or architectural plan prior to its approval:
- (1) **FDC Location.** Where the associated fire protection includes standpipes, please show the location of the Fire Department Connections (FDC). New fire department connections shall be located within 100 feet of a low-pressure hydrant per NFPA 14.
- (2) **Preliminary Sprinkler Calculations.** Provide preliminary fire sprinkler calculations on the drawings to show the water supply can support the sprinklers of the building. The preliminary fire sprinkler calculations shall be wet stamped and signed by a mechanical engineer or a C-16 contractor.

Any costs associated with required upgrades to the city water main and/or hydrants to provide adequate fire flow or sprinkler design demands are the responsibility of the developer/building owner.

Note: 2025 CFC Appendix B, **B105.3 Water supply for buildings equipped with an automatic sprinkler system.** For buildings equipped with an approved automatic sprinkler system, the water supply shall be capable of providing the greater of:

1. The automatic sprinkler system demand, including hose stream allowance.
2. The required fire-flow.