



PRC-05F
**Plan Review Checklist
Fire Sprinkler and Standpipe Systems**

Site Address:	XX	Application No.:	XX
Scope of Work:	XX		
Plan Reviewer:			
Telephone:	562-570-XXXX	email:	XX.XX@longbeach.gov

A. Permits

1. Paper plans are no longer accepted. All plans and documents must be submitted as a digital file in PDF format with no background color.
2. To obtain an installation permit for a fire sprinkler system, the applicant shall submit to the City of Long Beach, Community Development, Building and Safety Bureau the following:
 - a) Plans, sprinkler system components data sheets, calculations for the proposed automatic sprinkler system.
 - b) All approved alternative methods of constructions associated with the LBFD and LBCD may be obtained from the general contractor or architect.
3. Permits are required for any work involving a sprinkler system: Installation of a new system or Any alteration or addition or demolition to an existing system.
4. Over the Counter (OTC) plan review service: This service is limited to tenant improvement projects (existing office or retail uses) requiring the relocating a maximum of 50 or less sprinklers, where calculations or alterations of seismic bracing are not required.
5. Expedited plan check service: This is an alternative plan review service that accelerates the regular plan review process within the Building and Safety Bureau. Expedited projects are assigned to plan check staff within five (5) working days. See [BULLETIN IB-003](#).
6. Plan check fees will be collected when plans are approved and ready for issuance. See [Current fee schedule](#).
7. All installing contractors shall have a California Contractor’s License, a valid Worker’s Compensation certificate, and a Long Beach Business License. Note: A Fire Protection Contractor’s License (C-16) shall be required for the application for the Fire Sprinkler permit.
8. Each sheet of sprinkler plans must bear the stamp, registration number and expiration date of the responsible party. The responsible party is the registered fire protection engineer or licensed fire protection contractor (C-16).

9. The Fire permit card and the approved set of plans must be kept at the project site until final approval of the permit, after which they shall remain in the possession of the owner.
10. Resubmit via email directly to the plan checker that sent you the corrections. We will ensure that the resubmitted documents will proceed as expeditiously as possible. If an impasse is reached during the recheck, you may request that the plan check supervisor be summoned for a second opinion or to attempt to resolve and/or clarify the matter.
11. Major revisions to approved plans that necessitate additional review time may be subject to resubmittal and additional plan check fees as authorized by Section [18.06.030](#) of the Long Beach Municipal Code.
12. Reviewed plans and/or calculations not addressed past the expiration date of the permit application will require a new permit application form if you want to continue with the permit.
13. When all required approvals are obtained, the permit application must be signed by the licensed contractor, or authorized agent at the time the permit is to be issued.
14. When fire underground work is required, the criteria set forth in the LBFD requirements "UNDERGROUND FIRE SERVICE" shall be followed. A separate permit is required for underground fire service.

B. Plans

1. General requirements:
 - a) Plans and all revisions to the plans shall be dated. If utilizing an existing drawing or portion of a drawing, the area of work shall be highlighted and clouded with an appropriate symbol Δ (delta). Provide a revision list with a symbol, date, description, and initials.
 - b) Access doors for automatic sprinkler riser rooms and fire pump rooms shall be labeled with an approved sign. The lettering shall be in contrasting color to the background. Letters shall have a minimum height of 2 inches with a minimum stroke of 3/8 inch. ([CFC 901.4.7.2](#))
 - c) Automatic fire sprinkler system shall be designed, fabricated, and installed in accordance with NFPA 13, 2025 edition and local amendments enforced by the LBFD.
2. Title Sheet:
 - a) The following information shall be included:
 - i) Building information such as number of stories, building height, total building area, building construction type, occupant load, occupancy classification, project name and address.
 - ii) Scope of work and why the system is being installed, (e.g., required by the California Building Code or California Fire Code, required due to alternative method, or voluntary). Clearly indicate if the scope of work is new construction, tenant improvement, demolition, voluntary.
 - iii) A clear site map and vicinity map.
 - iv) Plans shall include the "2025 Long Beach Fire Sprinkler Verbatim Notes- NFPA 13".
 - v) Any other pertinent notes.
3. Floor Plan:
 - a) The following shall be clearly indicated:
 - i) Plans shall be fully dimensioned. The minimum scale for fire sprinkler plans is 1/8" = 1'-0".

- ii) Point of compass (north arrow).
 - iii) Use of each room or space (room description).
 - iv) The location of all pipes, sprinklers, sway braces, hangers, and other pertinent devices shall be clearly indicated on the plans.
 - v) Types of ceiling or roof construction, e.g., smooth, solid joist construction, beam construction, sloped ceiling.. etc. Provide elevation details.
 - vi) Submit an elevation plan/detail that includes ceiling and roof types, and any area of special consideration such as trusses (includes lightweight truss, TJI construction), vaulted/cathedral ceilings, etc.
 - vii) Indicate the type and size of structural members and the name of the truss manufacturer, if applicable. Lightweight truss construction includes composite wood joist, wood truss construction using metal connector plates, wood truss construction using steel web and steel bar joist.
 - viii) Construction must be rated to be considered non-combustible or limited-combustible construction. Omission of sprinklers within framing shall comply with those allowed per NFPA 13, exception to Section 9.2.1.
 - ix) Labs, storage, server, copy, electrical rooms shall be designed for ordinary hazard, maximum 130 sf spacing.
4. Sprinklers:
- a) Indicate the type, size, temperature rating, and manufacturer of the proposed sprinkler(s).
 - b) Submit the manufacturer's data sheet for every sprinkler type to be used.
 - c) Only new sprinklers shall be used.
5. Piping:
- a) All abandoned pipes shall be removed from the premises. If abandoned pipes cannot be removed, they shall be permanently marked as "abandoned in place".
 - b) Air Venting. A single air vent with a connection conforming to NFPA 13 Section 16.7 shall be provided on each wet pipe system utilizing any metallic pipe. (See A.16.7.). Automatic air vents shall be used.
6. Seismic Protection:
- a) Provide the seismic design report as part of the complete seismic bracing calculations submittal.
 - b) Note: S_s value, the short period response parameter, for specific building locations can be obtained from the following websites: <https://asce7hazardtool.online> and <https://www.seismicmaps.org>, to use with section 18.5.9.3 of NFPA 13.
7. Control Valves:
- a) Each floor and basement level of a building shall be provided with control valve and flow switch in accordance with [CFC 903.3.10](#), floor control valves shall be located within stairway designated as "Number 1". [LBMC 18.48.460](#)
 - b) Automatic breach control valves shall not be installed on any sprinkler system.

8. Signs:

- a) Permanent signs shall be provided at the riser. (NFPA 13 A16.17, and CFC Ch.80 amended [sections 29.4.3.](#))

9. Hydraulic Calculations:

- a) Fire protection system hydraulic calculations shall include a 10 percent safety margin between the available water supply and the required system supply.
- b) All hydraulic calculations shall include a copy of the letter from the water department that states the fire flow test data. Note: Fire flow data may be obtained from the Long Beach Water Department. Contact "LBWD" <https://forms.longbeach.gov/Forms/FireFlowTestRequest> at (562)570-2381.
- c) The area of operation may be reduced only as permitted by CFC [CH80-NFPA 13, section 19.2.3.2.3.1.](#)

10. A hydrostatic test is required for all new systems. The entire system shall be tested for two hours at 200 psi minimum or 50 psi above static pressure, whichever is greater.

11. As-built drawings are to be submitted at the time of final inspection when there are deviations from the approved plan(s).

12. Attachments:

- a) Manufacturer's specification sheets for all devices, equipment, and materials to be used shall be submitted.

C. Design

1. Standpipe:

- a) All standpipes shall be designed and installed in accordance with the 2024 Edition of NFPA 14, sizing of standpipe shall be hydraulically calculated per Sections 10.6.1.2 and 10.6.2 of NFPA 14.
- b) During construction ([CFC 905.10](#)):
 - i) In buildings required to have standpipes by [CFC 905.3.1](#), not less than one standpipe shall be provided for use during construction.
 - ii) Such standpipes shall be installed prior to construction exceeding 40 feet in height above the lowest level of fire department vehicle access.
 - iii) Such standpipes shall be provided with fire department hose connections at locations adjacent to all stairways used for construction access.
 - iv) As construction progresses, such standpipes shall be extended to within one floor of the highest point of construction having secured decking or flooring.
- c) All standpipe systems, except class II systems, shall be designed to deliver a minimum of 125 psi at the discharge of all standpipe outlets. ([LBMC 18.48.510](#)).
- d) Locations of standpipe hose connections:
 - i) In every required stairway, a hose connection shall be provided for each floor level. Hose connection shall be located at the floor landing of each floor, unless otherwise approved by the Fire Code Official. See California Building Code Section 909.20.2.3 for additional provisions in smokeproof enclosures. ([LBMC 18.48.520](#)).

- ii) Maximum coverage per outlet shall be as specified by [CFC 905.4 \(6\)](#)
 - e) Where emergency helicopter landing facility is provided in a high-rise building, a class II wet standpipe shall be provided and located in such a manner that it will not restrict or reduce the required landing and takeoff area.
 - f) Where two or more standpipes are installed in the same building or section of building, they shall be interconnected.
2. **Automatic sprinkler:** Automatic fire sprinkler system shall be designed, fabricated, and installed in accordance with NFPA13, 2025 edition and local amendments enforced by the LBFD.
- a) Automatic sprinkler systems shall be provided in the locations described in the following:
 - i) Throughout new buildings and structures described in Sections 903.2.1 through 903.2.12 and Sections 903.2.14 through 903.2.21 as modified herein.
 - ii) Throughout all new single-family dwellings and duplexes. ([LBMC 18.48.440](#)).
 - iii) Throughout all new multi-family (3 or more units) residential, hotels, motels and similar buildings. ([LBMC 18.48.440](#)).
 - iv) Throughout all new commercial, industrial and non-residential buildings that require two or more exits or that are greater than 3,000 sf. ([LBMC 18.48.430](#)).
 - v) An automatic sprinkler system shall be installed in all existing occupancies as required by this section, if any of the following occurs: ([LBMC 18.48.420](#)):
 - 1) There is a change in occupancy classification to one that would require an automatic sprinkler system per the Fire Code in the new occupancy.
 - 2) The Fire Code Official determines that an automatic sprinkler system is required to provide a minimum level of public safety.
 - vi) Partial automatic sprinkler systems are not allowed.
 - 1) Where automatic sprinkler systems are required to be installed by this section, or by any other sections in this code, or any nationally recognized standards, or are electively installed, the automatic sprinkler system shall be installed throughout the entire building, unless a fire wall, with no door or window openings, is constructed per the California Building Code Section 706 to separate the building or fire areas. ([LBMC 18.48.420](#))
 - b) Alterations to existing systems:
 - i) The following shall be stated on the plans:
 - 1) A complete description of the existing system design data.
 - 2) The hazard to justify the system classification.
 - 3) A description of the modifications proposed.
 - 4) The size, type, manufacturer, and location of the existing pipes, sprinklers, hangers, fasteners, and building structural elements to which the system is attached.

- ii) When replacing or installing sprinklers, the following shall be observed:
- 1) Re-use of sprinklers is not allowed. Relocating an existing sprinkler with a flexible sprinkler hose fitting is allowed without replacing the sprinkler if the relocation can be properly installed.
 - 2) When adding or replacing sprinklers, they shall be of the same orifice, and temperature rating and K factor, response type.
 - 3) Submit data sheets of existing and new sprinklers.

D. 2025 Long Beach Fire Sprinkler Verbatim Notes-NFPA-13

1. This automatic fire sprinkler system shall be designed, fabricated, and installed in accordance with NFPA 13, 2025 edition and local amendments enforced by the LBFD.
2. Overhead fire sprinkler plans will not be approved until the underground plans have been submitted and approved by Fire Plan Check.
3. Sprinkler plans shall be approved prior to installation of any pipe.
4. Call LBFD Inspection Scheduling at (562) 570-2587 to schedule all inspections at least 48 hours in advance.
5. All sprinkler piping shall remain uncovered until inspected by LBFD. ([CFC 109.3](#))
6. The following inspections shall be witnessed by the Long Beach Fire Department:
 - a. Underground pre-thrust.
 - b. Underground post thrust/hydrostatic testing at 200 PSI or a minimum of 50 PSI above operating pressure, whichever is greater.
 - c. Underground flush.
 - d. Overhead hydrostatic testing at 200 PSI or a minimum of 50 PSI above operating pressure, whichever is greater.
 - e. Overhead rough.
 - f. System final.
7. A set of approved plans, including hydraulic calculations for new systems, shall always be retained at the job site.
8. All valves shall have a permanently affixed sign identifying their function and building served.
9. All system risers shall be equipped with a Hydraulic Design Information Sign at described in NFPA 13, 2025 edition, Section 29.4.1 as amended.
10. Floor control valves require a Hydraulic Design Information Sign, containing information for the floor. (NFPA Section 29.4.2)
11. Fire sprinkler system control valves shall be located within stairway designated number 1 ([LBMC 18.48.460](#), [CFC 903.3.10](#))
12. Access doors for automatic sprinkler riser rooms and fire pump rooms shall be labeled with an approved sign. The lettering shall be in contrasting color to the background. Letters shall have a minimum height of 2 inches with a minimum stroke of 3/8 inch. ([CFC 901.4.7.2](#))
13. All standpipe systems, except class II systems, shall be designed to deliver a minimum of 125 psi at the discharge of all standpipe outlets. ([LBMC 18.48.510](#), CFC 905.1.1)
14. In every required stairway, a (class I standpipe) hose connection shall be provided for each floor level. Hose connections shall be located at the floor landing of each floor, unless otherwise approved by the Fire Code Official. See CBC Section 909.20.2.3 for additional provisions in smokeproof enclosures. ([LBMC 18.48.520](#), [CFC 905.4](#))
15. The installer shall perform all required acceptance tests in the presence of the fire inspector.

16. All underground mains and lead-in connections shall be flushed in accordance with NFPA 13 and/or NFPA 24 prior to connection to the overhead system. The flush must be witnessed by LBFD.
17. When a hydrostatic test is required by LBFD, the system shall be hydrostatically tested for two hours at 200 PSI or a minimum of 50 PSI above the system operating pressure, whichever is greater. All new systems require a hydrostatic test.
18. All FDC's, PIV's, DDCA's and exterior/exposed sprinkler riser valves shall be painted OSHA Safety Red.
19. Fire sprinkler or supply piping exposed to the sky or susceptible to wet conditions shall be painted (any color) or otherwise coated to inhibit corrosion.
20. Stainless steel assemblies and piping may be left unpainted provided that any hose connections, valves or other components operated by the fire department are painted OSHA Safety Red.
21. Working Pressure: Piping, fittings, and other system components shall be rated for the maximum system working pressure to which they are exposed but shall not be rated at less than 175 psi for components installed above ground and 150 psi for components installed underground. (NFPA 13, Section 7.1.2)
22. Pipe lateral and longitudinal bracing and hangers shall be per NFPA 13, 2025 edition.
23. Branch line restraint is required at regular intervals per NFPA 13, 2025 edition.
24. Stock of Spare Sprinklers. A supply of at least six spare sprinklers shall be maintained on the remised so that any sprinklers that have operated or been damaged in any way can be promptly replaced. Update heads in the cabinet. (NFPA 13, Section 16.2.7.5)
25. The sprinklers shall be kept in a cabinet located where the temperature to which they are subjected will at no time exceed 100 degrees F. (NFPA 13, Section 16.2.7.3)
26. Immediate unobstructed access to fire department connections (FDCs) shall be maintained at all times.

To request this information in an alternative format or to request a reasonable accommodation, please contact the Community Development Department at longbeach.gov/lbcd and 562.570.3807. A minimum of three business days is requested to ensure availability; attempts will be made to accommodate requests with shorter notice.