



FIRE SPRINKLER CHECK LIST RESIDENTIAL & COMMERCIAL

Building Department

1480 Main Street

St. Helena, CA 94574

(707) 968-2657

For additional information, forms & documents please visit us on the web at: <http://www.cityofstheleena.org/content/building>

All items below are required at time of submission for new construction and additions. Together with the items in the "Forms and Documents" section below, they make a complete set. More detailed information is on the following pages. Please allow a minimum of 1/2 hour for your plans to be checked in on large projects.

Number & Size of Drawings

■ 4 Complete Sets of Plans including architectural-only drawings

Your drawings must be on uniform sized paper, preferably on 24" x 36" paper, drawn to scale using English measure, and signed by the architect, engineer, draftsman, or person who drew them. Smaller sizes will not be accepted.

Plans must be submitted collated and bound by a maximum of three staples. Please do not use multiple staples *within* the same plan set.

PROVIDE A 4" X 4" CLEAR AREA ON THE BOTTOM RIGHT SIDE OF EACH DRAWING FOR CITY APPROVAL STAMP.

FORMS & SUPPORTING DOCUMENTATION

All forms and documents below are required with your submittal.

- Completed Building Permit Application
- Hydraulic Calculations
- Manufacturer Specifications

Fire sprinklers are required for all new residential and commercial projects. Fire sprinklers are required for additions increasing square footage by 50% or more; alterations removing 50% or more of the ceiling material; or a combination of addition and removal of ceiling material. Fire sprinklers are a concurrent submission (under separate application).

Some projects may require some or all the listed additional documents below and/or additional documents not listed.

- Owner-Builder Disclosure Form
- Agent Authorization Form

■ Plan Requirements (Note: many of the plan requirements listed below are largely covered with the submission of architectural plans)

- Plans shall be drawn to scale (1/8" = 1'-0" min. excluding site plans), fully dimensioned and legible and printed on uniformly sized paper preferably 24" x 36".
- Drawings submitted for permit shall be intended for construction. Plans stamped/marked "not for construction", "permit only", "preliminary", or similarly stamped will not be approved for issuance or reviewed for code compliance.
- 4 sets of plans, stamped and wet-signed by the architect or engineer, or wet signed by the design professional including architectural-only drawings.
- Provide a clear boxed area on the plans, a minimum of 4" wide by 4" in the same position on the bottom right side of each plan sheet for the purpose of the City of St. Helena approval stamp(s).
- 4 sets of hydraulic calculations, stamped and wet-signed by the engineer (if applicable).

■ **Title Page:**

- Legal job address, Assessor's Parcel Number (APN), and a page index.
- Names, addresses, phone numbers, and emails of property owner, contractor, design professionals and consultants, with titles and license/registration numbers.
- Compass point.
- Building occupancy classifications.
- Note zoning district (i.e. medium density residential, low density, woodlands and watersheds, etc.).
- Type of construction - (Wood - Type V), (Nonrated - B), (Fire Rated-A).
- Square footage per floor of structure with identified separate uses.
- Itemized building square footage per area (existing, new, alteration, addition, garage)
- Building height
- Wildland-Urban Interface Area ____Yes ____ No

■ **Site Plan Requirements:**

- Drawn to a site specific appropriate scale to show the entire site (note: an additional detailed site plan may be required to communicate the scope of work.
- Water lateral lines and connection points, , water meter location and size, location & elevation of fire hydrants, location of water tanks intended for fire suppression, locations of wells intended for fire suppression, location of swimming pools intended for fire suppression.
- Location of backflow preventer.
- Size of city water main, and elevation, if dead end, direction and distance to nearest circulating main.
- Private fire service main size, length, location, materials, and POC to City main.
- Fire roads and fire access areas (dimensioned) indicating new and existing, if applicable, with a north arrow.
- All structures on property (existing, proposed, any to be demolished) with distance to property lines and with distances between structures.
- There may be other information required by Building, Fire, Planning, Public Works, and Police.

■ **Floor Plan Requirements:**

- Show complete floor plan (all rooms identified) for each level with square footage summaries with uses labeled (habitable/conditioned, garage, accessory etc.). Show existing and proposed if applicable.
- Must have complete dimensions, ceiling heights, and be labeled with proposed uses.
- Location and labeling of all partition walls.
- Location and labeling of all fire walls.
- Location of all concealed spaces, bathrooms, closets, attics - any small enclosure in which no fire sprinkler are to be installed, cite code section.

■ **Cross Section:**

- Full height cross section of building, including structural member information, ceiling construction, and method to protect nonmetallic pipe.

■ **Exterior Elevation Plan Requirements:**

- Show all sides of exterior building elevations.
- If in the "Woodlands and Watersheds" zoning designation check with **Building Official and Fire Marshall** for special requirements. Provide Wildland-Urban Interface materials if applicable (detailing of exterior walls or assemblies for manufactured products, special siding or venting)

■ **Hydraulic Calculations/System Design:**

- Name of contractor.
- Hydraulic reference points on plan to match nodes in calculations.
- Total quantity of water and pressure required noted.
- Relative elevation of sprinklers.
- If room design is used, all unprotected wall openings for the area/floor protected.
- Calculation loads for sizing and details of sway bracing.
- Backflow preventer information.
- Design area of water application.
- Minimum rate of water application.
- Area per sprinkler.
- Total water requirements as calculated, including inside and outside hose, and water curtain and exposure sprinklers.
- Allowance for in-rack sprinklers.
- Limitations on special sprinklers or extended coverage sprinklers.

■ **Water Supply:**

- Fire flow test results from the City of St. Helena and elevation of hydrants.
- Location of water flow test, indicating static, residual, and pielo pressure and outlet test size.
- Date and time of test..

■ **Typical Branch Lines:**

- Location and size of riser nipples.
- Type of fitting and joints.
- Location of all welds and joints.
- Type and location of hangers, sleeves, braces, methods of securing sprinklers.
- All control valves, check valves, drains and test connections.
- Make, type, model, and size of alarm or dry pipe valve.
- Location of alarm bell.
- Make, type, model and nominal k-factor of sprinklers, include SIN and temperature rating of sprinklers.
- Total area protect by each system, number of sprinklers on each riser, per floor.
- Dry pipe, pre-action, combined dry pipe pre-action or deluge system.
- Approximate number of gallons in each dry system.
- Pipe type and schedule.
- Nominal pipe size and cutting lengths of pipe.