

How will I know if I need a fire sprinkler system?

The City of Millbrae tries to identify projects that will need fire sprinklers as early in the process as possible.

Projects needing Planning Commission Approval

The first contact with the Planning or Building Divisions we will strive to determine if this system is needed.

Next opportunity will be the staff review board review. This is where staff reviews your project and provides comments.

Projects not needing Planning Commission approval and come straight to the Building Division

The Building Division try and determine the need for fire sprinklers at its initial meeting with a project applicant.

We will also determine need for fire sprinklers during the plan checking process.

Projects with Building Permits who are found later to need a sprinkler system

While the Building Division strives to

identify projects that may need a fire sprinklers system. It may not be possible until work has started on a project for the Building Division to determine that a fire sprinklers system is required.

Building alterations and additions that during the process of demolition of interior surfaces, walls, roof, etc exceed the limits outlined below may be required to install a fire sprinkler system. This will include upgrading of the main water service.

If it is found in the field that a projects has exceeded the limits below, the Building Division in concurrence with the Fire Marshall may require a fire sprinkler system to be installed.

MMC Sections 9.30.140

Automatic fire extinguishing systems (Fire Sprinklers)

(a) An automatic fire sprinkler system shall be installed in the occupancies and locations as set forth in this Section, unless the Fire Chief determines that the public health and safety do not require installation of a fire sprinkler system. Fire sprinkler systems shall be installed in accordance with Section 903.3 or the most current addition of a minimum standard:

1) NFPA Pamphlet 13D for residential,

one and two family dwelling occupancies.

2) NFPA Pamphlet 13R for multi-family dwellings up to four stories in height, and

3) NFPA Pamphlet 13 for all other types of occupancies for which fire sprinkler systems are required

(b) A fire sprinkler system shall be installed throughout the entire building (including pilot heads in basement, attic or potential areas of storage) or structure of any occupancy whenever the following condition is found to exist:

1) When a proposed addition, alteration or repair of any building or structure, (except one or two-family dwellings), will result in an increase in the existing square footage of the structure by twenty-five percent or more or alterations will involve seventy percent or more of the existing square footage, and the building or structure, upon alteration or addition as proposed, either

(a) has a total area of 3,000 square feet or more

(b) is three (3) stories or more thirty-three (33) feet or more in height, measured from the lowest floor surface of the structure.

i) The square footage of every room being added or altered shall be included in the calculation of total square footage of addition or alteration.

ii) The entire square footage of an individual room shall be considered added or altered when at least fifty percent (50%) or greater of the linear length of interior wall sheeting or ceiling, concrete, brick or masonry substance of any one wall within the room is new, removed, or replaced.

iii) The conversion of a single-family dwelling to a two-family dwelling or a multi-unit structure shall be subject to this Section (b).

Garage Fire Sprinkler Retrofitting Requirements

Fire sprinklers, which may be part of the domestic water supply system, shall be installed in the garage of any building or structure, including one-or-two-family dwellings, when the cost of the addition to, alteration of or repair of the structure or building (with the exception of repairs to the exterior surfaces) for which a building permit(s) is required is estimated to exceed One Thousand Dollars (\$1000).

A minimum of one (1) fire sprinkler head shall be installed above each

parking stall and the homeowner may perform said installation up to 4 heads. A Licensed Fire Sprinkler (C-16) contractor is required for 5 or more heads.

New Buildings

Where Required. Approved automatic sprinkler systems shall be installed throughout all new buildings and structures. This requirement does not affect the designer's ability to use a fire sprinkler system for area and height increases that are allowed by the Fire or Building Codes.

Existing Group R Occupancies Retrofitting Requirements

All existing one and two family dwellings and structures shall be retroactively protected by an approved automatic extinguishing system when they meet one or more of the following criteria:

- a) Calculations of square footage involved will be based on criteria set forth above.
- b) A total building floor area is equal to or in excess of 3000 square feet in size.
- c) More than three stories or 33 feet in height measured from the lowest grade of fire department access to the top sill

plate.

Exempt Locations.

a. At the top of elevator hoist ways and elevator machine rooms enclosed by fire barriers as required by the building code.

b. Inspectors Test Valves. Inspector Test Valves shall be provided for each system and located at the furthest point away from the sprinkler riser.

Additional Residential Sprinkler Locations.

The installation of a residential fire sprinkler system shall conform to the following:

1. Sprinklers shall be required in all rooms including closets, restrooms, bathrooms, powder rooms, and toilet rooms regardless of their size.2. Sprinklers shall be required throughout carports and garages.

Exception: Detached carports and garages less than 2,000 square feet in area and separated from residential buildings complying with Section 503.1.2 of the building code and assuming a property line between all other structures.

2. Sprinkler coverage shall be provided

in the following additional locations:

- a. Attics adjacent to storage, mechanical equipment, electrical equipment and attic access openings.
- b. Attics and crawl spaces containing mechanical and/or electrical equipment.

Exterior Horn / Strobe Requirements

1. An approved exterior rated horn/strobe shall be connected to every automatic sprinkler system. The horn / strobe shall be installed facing the street and is activated by a water-flow switch.
2. An exterior rated horn-strobe facing the street shall be provided that is activated by a water-flow switch.

Fire Sprinkler Monitoring

An automatic fire sprinkler system shall be supervised by an approved central, proprietary or remote station service or a local alarm that will give an audible signal at a constantly attended location.

EXCEPTION: One and two-family dwellings.

New or Upgrading of existing water services.

New Water Services

New water service installations shall be separately installed and shall have a backflow prevention device installed above ground, Shall have a bypass meter installed to monitor water usage.

Contact Millbrae Public Works as early in the process as possible for installation and deposit costs.
650-259-2339.

Upgrading of existing water services.

When a fire sprinkler system requires upgrading to a larger size water service it is the responsibility of the property owner to pay all costs associated with the installation and associated deposits.

The City of Millbrae will install all services up to 2" diameter.

For services larger than 2" it is the responsibility of the owner to contract with a General Engineering Contractor ("A" License) to install the fire service tap and piping to the property.

Contact City of Millbrae Public Works as early in the planning process to find out what the costs and deposits required will be for your specific project.
650-259-2330

Most residential properties have a 3/4" water service. In new or retrofitted home a minimum 1" water service is

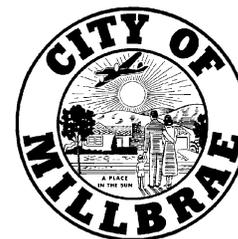
required.

Questions and / or Concerns

Contact the Millbrae Fire Department

650-259-2300 - Main Line
650-259-2406 - Fire Marshall

Millbrae Fire Department
Fire Station 37
511 Magnolia Ave,
Millbrae, Ca. 94030



FIRE SPRINKLERS

Am I required to have one?

**What are the
requirements?**

Millbrae
Fire Department
511 Magnolia Ave.
Millbrae, Ca. 94030

Fire Prevention
650-259-2406
website - www.ci.millbrae.ca.us