



## **MAINTENANCE OF RESIDENTIAL FIRE SPRINKLER SYSTEMS – A GUIDE FOR HOME OWNERS**

Many homes in Livermore and Pleasanton have automatic fire sprinkler systems installed. These systems are designed to provide added fire safety by controlling the fire until the Fire Department arrives. Depending on the type of home – single family homes, condominiums, townhouses, apartments – the type and responsibility for maintenance of these systems varies.

### **Apartments**

- The codes require specific inspection, testing and maintenance activities to keep the systems in working order.
- The responsibility for maintenance of fire protection systems in apartments rests with the building owner.
- The tenants must provide access for the required routine system inspections.

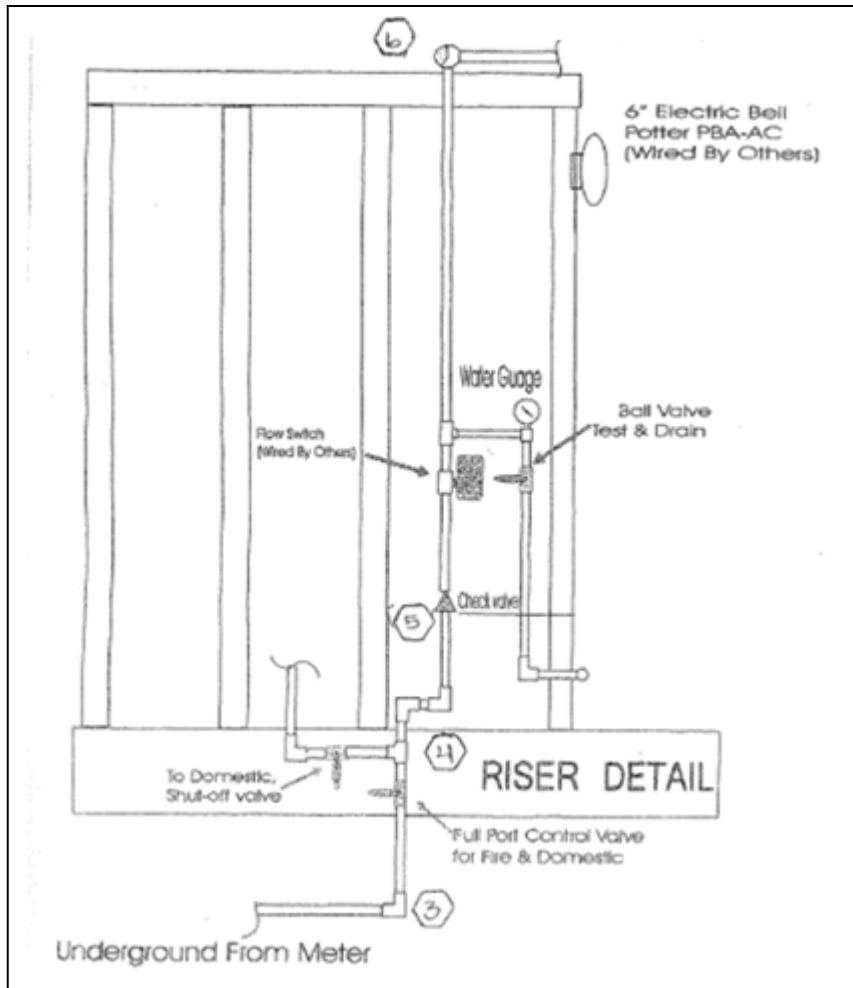
**Condominiums and townhouses** with a **shared** fire sprinkler system (groups of homes/units share a connection to the water supply).

- The codes require specific inspection, testing and maintenance activities to keep the systems in working order.
- The responsibility maintenance of the fire protection system is generally handled by the home owners' association.
- The home owners must provide access for the required routine system inspections.

**Single family homes, condominiums, townhouses** with **independent** fire sprinkler systems (each home/unit has a separate connection to the water supply and is separated from each other by fire rated construction).

- There are no specific inspection, testing or maintenance activities required by the code.
- Work done to repair or replace any part of the system needs to be done by a licensed C-16 contractor. Licensed contractors can be found by searching the internet for "Sprinkler contractors"
- Normally, the domestic water supply to the house and the fire sprinkler riser split after the last shut-off valve on the water line. This is to ensure that the fire sprinkler water cannot be shut off without the homeowner being aware that it is shut off. When the water is shut off to make repairs or modifications to the fire sprinkler system or the plumbing system, extra care should be taken with respect to fire safety. If at all possible, the system should be turned on at end of the day.

- Click on this link to watch an excellent short video about home fire sprinkler systems.  
<https://www.youtube.com/watch?v=wH1aaoD0kUs>
- The figure below illustrates the design of a typical fire riser:



We recommend you follow the steps below monthly to maintain your system in working order.

### TEST THE ALARM

1. Determine if your fire sprinkler system is connected to an alarm monitoring service. If your system is monitored by an alarm monitoring service, you must first notify the service before testing your fire sprinkler system "alarm" – this ensures they will not call out the Fire Department.

2. Test the fire sprinkler system "alarm". This is done by opening the Drain/Inspector Test Valve, which is located on the sprinkler riser (usually in the garage and accessible via an access door in the wall). Always open and close the valve slowly to avoid damage to the system. When this valve has been opened, water will flow out the drain line, which normally takes the water outside, and the fire bell will ring, which may take up to a full minute. Once the Drain/Inspector Test Valve is closed, water will stop flowing from the drain line and the bell will stop ringing.

### VISUALLY INSPECT THE SYSTEM

1. You should visually inspect the fire sprinklers to assure that:
  - a. Furniture, boxes, etc. have not been located within 18" of the height of the fire sprinkler heads.
  - b. Nothing is hung from the sprinkler pipe or fire sprinkler heads.
  - c. If any of the following conditions are present, you need to contact a licensed fire sprinkler contractor. If the sprinkler heads are concealed with a flat cap, do not remove the cap - inspect it as is.
    - i. Fire sprinkler head(s) show signs of damage or the cap (if applicable) is missing or out of place.
    - ii. Fire sprinkler head(s) or cap(s) have paint on them
    - iii. Fire sprinkler head(s) or cap(s) have corroded
    - iv. Fire sprinkler head(s) or cap(s) are loaded with dust, dirt, sawdust etc. If materials can be removed without touching the head or cap – vacuum or blower – there is no need to call a contractor.

2. Inspect the accessible portions of the riser to check for signs of corrosion. A licensed contractor should be contacted to evaluate any corrosion found.

**If you have questions or would like further information, please contact us at 925-454-2361.**



Corrosion on riser