

Maintenance of your Home Protection Systems



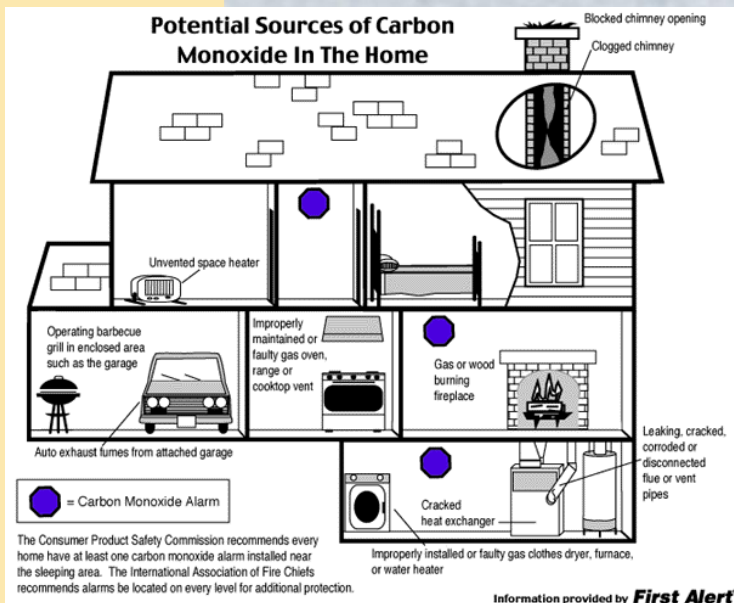
Maintenance of your Home Protection Systems

Protecting you family through the proper installation, use, and maintenance of:

- Carbon monoxide detectors
- Smoke alarms
- Fire sprinklers

Carbon Monoxide

Carbon monoxide (CO) is an odorless, colorless, toxic gas. Because it is impossible to see, taste, or smell the toxic fumes, CO can kill you before you are aware it is in your home.



Carbon Monoxide

Sources of CO in the home may include:

- Gas space heaters
- Leaking chimneys
- Furnaces
- wood stoves
- gas water heaters
- gas stoves
- gasoline powered equipment
- Automobiles
- tobacco smoke.

Carbon Monoxide

Carbon monoxide symptoms are often mistaken for flu symptoms, including:

- Headaches
- Dizziness
- Disorientation
- Nausea
- Fatigue



Carbon Monoxide

Takes steps to protect your family from CO poisoning:

- Make sure all gas appliances are in good working condition.
- inspect your gas lines for leaks.
- Keep your chimneys clear of debris
- make sure your furnace is in good working order.
- Keep the door between the home and an attached garage closed.

Carbon Monoxide

California requires all "single-family homes with an attached garage or fossil fuel source to install carbon monoxide alarms..." Similar to smoke alarms, CO alarms detect the presence of CO in the air and make a noise to alert residents when the gas level approaches harmful levels. They can be purchased at Home Depot, Lowe's, Target, Wal-Mart, and other similar retailers.



Carbon Monoxide

If you suspect CO poisoning has occurred or if an alarm goes off:

- Call 9-1-1
- Ventilate area, turn off potentially problematic appliances, & leave the house.
- Do not re-enter the building until you are cleared to do so by emergency personnel.
- Make sure the paramedics and later, the physicians, know you suspect CO poisoning.

Smoke Alarms and Fire Sprinkler Protection



Smoke alarms are designed to detect smoke & alert homeowners of a fire.

Fire sprinklers are designed to save lives by controlling or even extinguishing a fire.

Smoke Alarms and Fire Sprinkler Protection



A recent study by the US Fire Administration found that only 72-76% of people wake up when a smoke alarm is sounded. In fact, one in four U.S. home fire fatalities occurred in homes with working smoke alarms, according to NFPA.

Smoke Alarms and Fire Sprinkler Protection



The combination of working smoke alarms and home fire sprinklers, however, reduced the likelihood of death from a fire by more than 80%.

Home Smoke Alarms

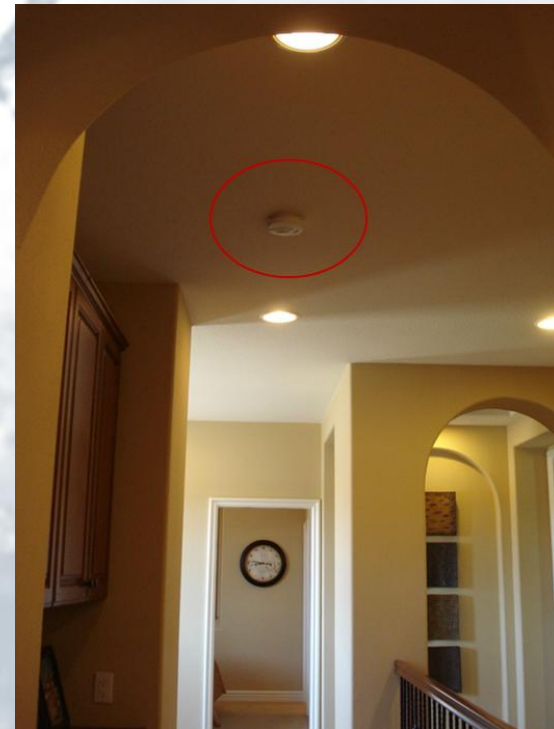


Proper Use
Testing
Maintenance

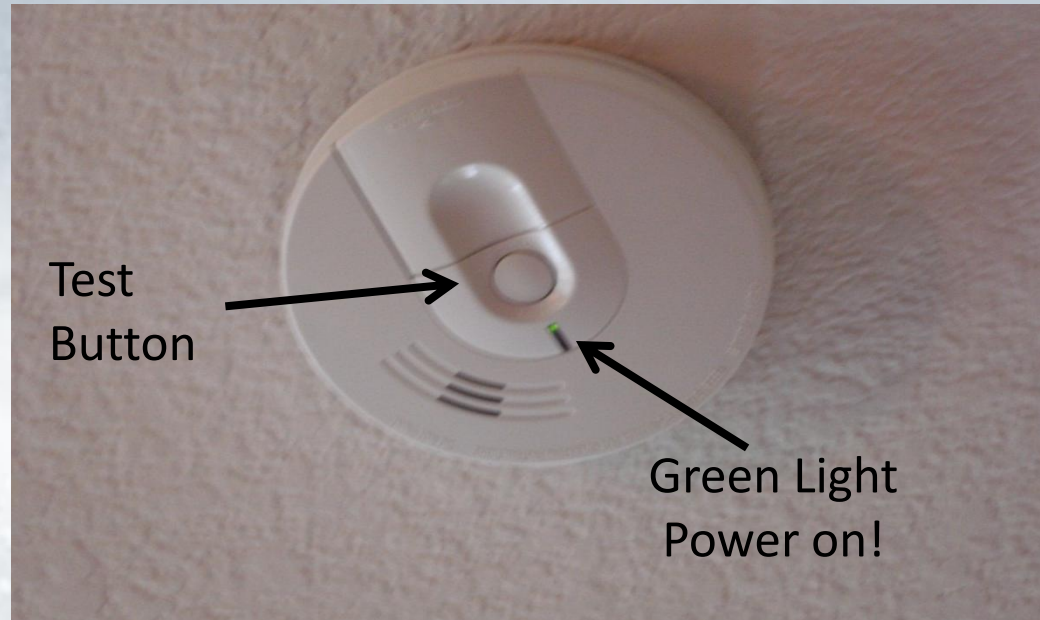
Home Smoke Alarms

Proper Use

Smoke alarms should be placed on every level of your home in hallways and in each **bedroom**.



Home Smoke Alarms Testing



Test each smoke alarm in your home once a month to make sure they are functioning properly.

Home Smoke Alarms Testing



If your alarms are hardwired, testing one alarm should trigger all of the others to go off.

Home Smoke Alarms Testing



For alarms that are hard to reach, use a pencil or something similar. A ladder can also be used if the alarm is very high up.

Home Smoke Alarms Maintenance



Batteries should be changed once a year, even if the alarm is functioning properly. The battery should also be changed if the alarm is beeping, even if it is hardwired. Alarms should be cleaned annually to remove dust as well.

Home Fire Sprinkler System



- Installation
- System Components
- How Do They Work?
- Testing
- Maintenance

Home Fire Sprinkler System Installation



Typical attic installation. Chlorinated polyvinyl chloride (CPVC) Pipe is used in most installations. Be careful when putting nails or screws through walls so as to not pierce the pipe.

Home Fire Sprinkler System Installation



Finish product. Notice the flat plates.

Home Fire Sprinkler System Installation

Sprinkler
Heads:



Pendant



Side wall

Dome



Flat Plate



Your system has special life-saving, rapid-response fire sprinkler heads. These heads are specifically and exclusively for residential use.

Home Fire Sprinkler System Components



Spare sprinkler heads are found in the red box, which is usually located in the garage. The box also contains the contractor's name and phone number and a wrench. When replacing a sprinkler head, be sure you are using the exact same type of sprinkler head.

Home Fire Sprinkler System Components

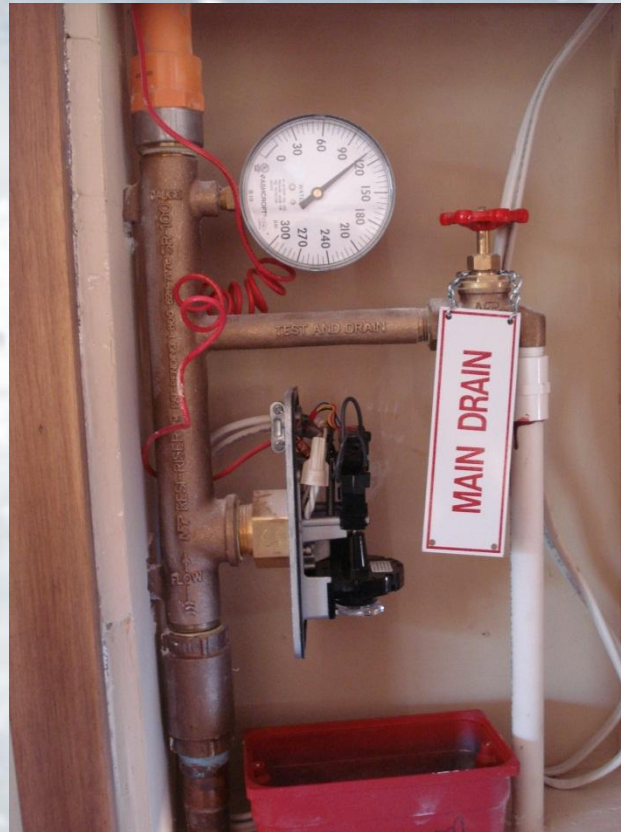
Water
Supply
(Normally
located in
garage)



Home Fire Sprinkler System Components

Flow Switch

(Causes bell to ring if water is flowing. Notifies monitoring company for monitored homes.)



Home Fire Sprinkler System Components

Gauge

(Indicates proper water pressure. Exact pressure may vary from home to home but below 200 is considered normal.)

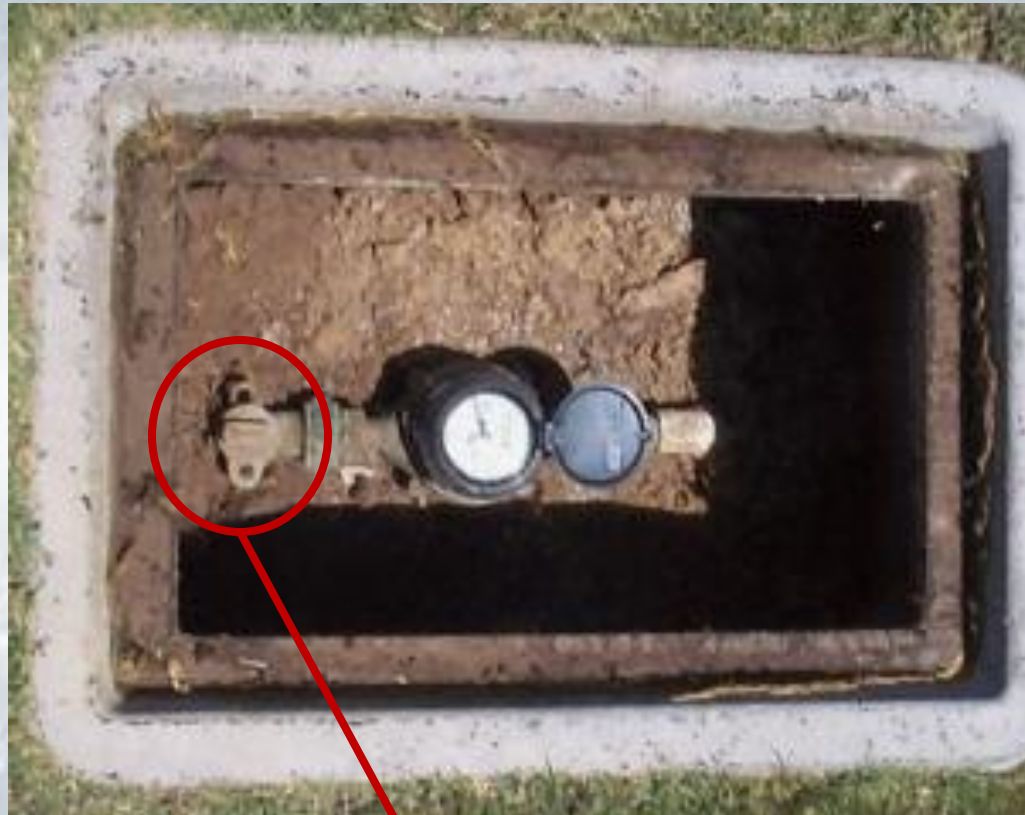


Gauge



Home Fire Sprinkler System System Components

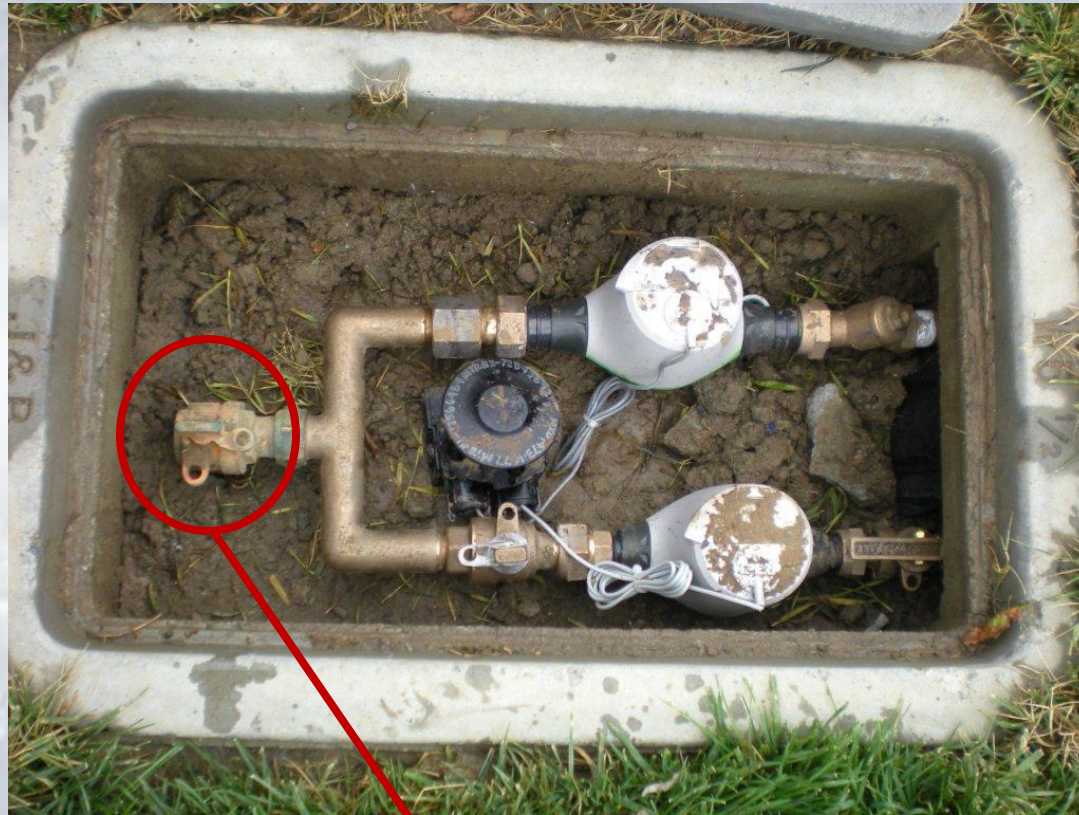
Water
Meter
(used to
turn off
water flow
in case of an
activation.)



Main water supply valve on a single water meter

Home Fire Sprinkler System System Components

Water
Meter
(used to
turn off
water flow
in case of an
activation.)



Main water supply valve on a double water meter

Home Fire Sprinkler System Components

Fire
Sprinkler
Bell
(Alerts
homeowner
and neighbors
of activation.)



Home Fire Sprinkler System

How do Residential Sprinklers Work?



A single residential sprinkler can protect a room area up to 20' X 20' – with an average house requiring only 20-30 sprinklers.

Sprinklers are activated individually by heat. Only a threatening fire can generate enough heat (about 155°F) to activate a sprinkler.

Home Fire Sprinkler System

How do Residential Sprinklers Work?



Only the sprinkler closest to the fire will activate, spraying water directly on the fire and the area that the sprinkler has been designed to protect.

Home Fire Sprinkler System

How do Residential Sprinklers Work?



When exposed to a high enough heat level, the sprinkler cap will fall off and the capsule in the sprinkler head will break, allowing water to flow.

Sprinklers can control or even extinguish the fire before heat and smoke turn deadly, allowing you and your family to escape safely and limiting damage to your home.

Home Fire Sprinkler System

How do Residential Sprinklers Work?



Your sprinkler system can be linked to the local fire company or home alarm system so that they are immediately notified when a sprinkler activates. Most sprinklers are NOT monitored. If you ever hear one ringing, call 9-1-1.

Home Fire Sprinkler System

How do Residential Sprinklers Work?

For your safety, and to be sure your automatic fire sprinkler is operating properly, remember the following “Dos and Don’ts”:

DO VISUALLY check your system, including the sprinkler head, for damage.

DO NOT HANG anything from the fire sprinkler heads or pipes.

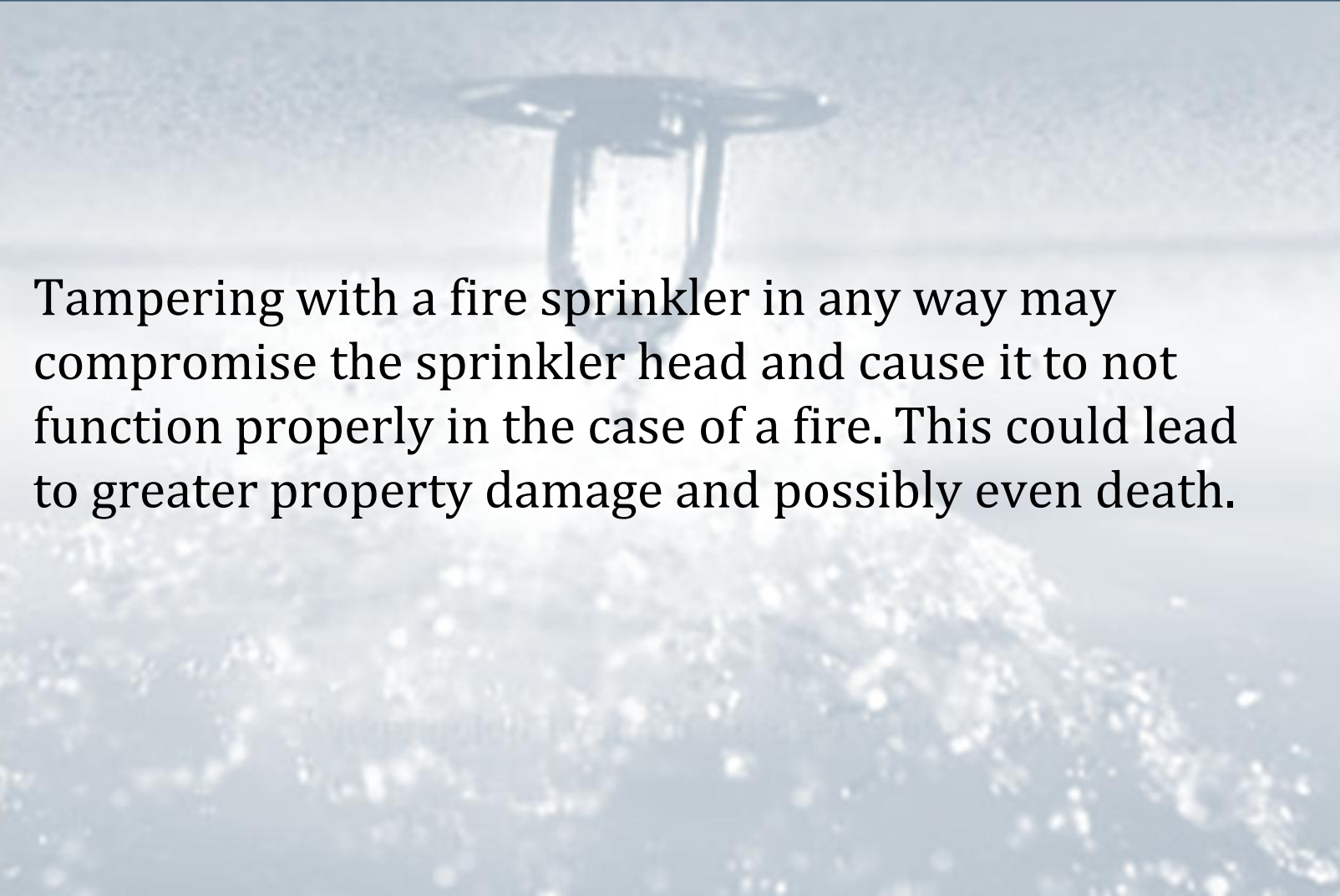
DO NOT PAINT the fire sprinkler covers or heads.

DO NOT TAMPER with the fire sprinkler heads.

DO NOT HIDE sprinkler heads with furniture, decorations, etc.

Home Fire Sprinkler System

How do Residential Sprinklers Work?



Tampering with a fire sprinkler in any way may compromise the sprinkler head and cause it to not function properly in the case of a fire. This could lead to greater property damage and possibly even death.

Home Fire Sprinkler System Testing



TEST YOUR SYSTEM QUARTERLY

NOTE: If your fire sprinkler system is monitored off site, notify monitoring company **before** testing.

Open the Inspector's Test Valve to be sure water flows and the alarm sounds.

Home Fire Sprinkler System Testing



Water will flow out of the valve before the bell sounds. There may be a short delay from the time the water flows to the time the bell sounds. 30 to 45 seconds is normal.

Home Fire Sprinkler System Testing

This video shows what it will look and sound like when you test your system.



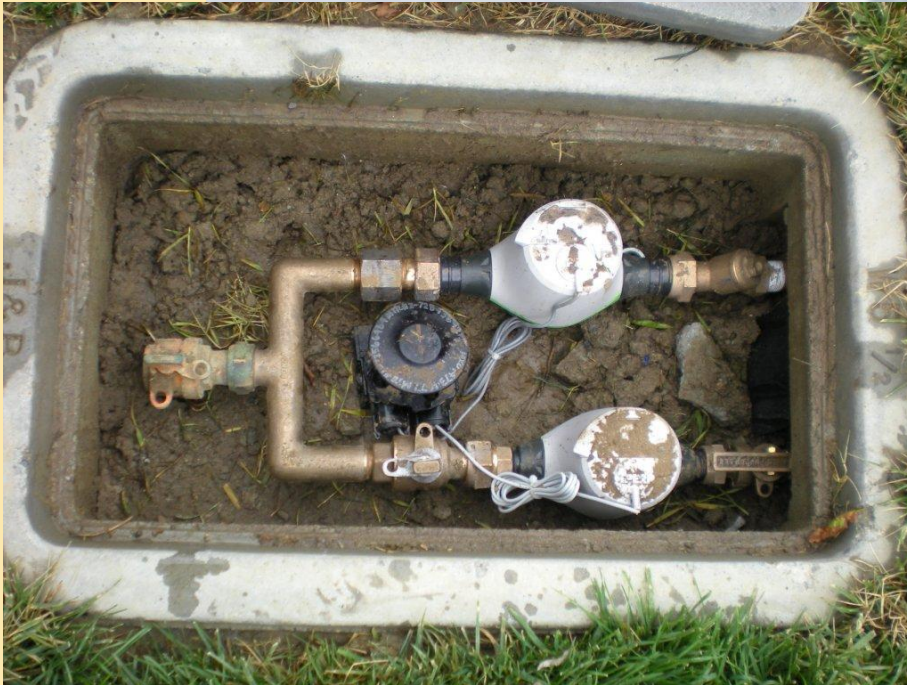
Home Fire Sprinkler System Maintenance



Make sure the bell remains clear of debris, including bird nests.

Alarm label signs should be visible at all times. If the lettering fades over time, replace signs can be purchased at Home Depot, Lowes, and similar stores as well as online.

Home Fire Sprinkler System Maintenance



Keep area around the main water valve clear so it remains easily accessible in case of an emergency. You may wish to keep a crescent wrench with the meter.

Home Fire Sprinkler System Maintenance

If you encounter an issue with your home fire sprinkler system, contact a fire sprinkler contractor. A plumber is not certified to work with home sprinkler systems.

Your sprinkler contractors name and number should be printed on the red box above the water supply in garage. A list of home sprinkler system contractors can be found at

<http://www.rsf-fire.org/assets/documents/ordinances/resources/141-Sprinkler%20Contacts.pdf>

Resources

California State Fire Marshal (<http://osfm.fire.ca.gov/index.php>)
Environmental Protection Agency (www.epa.gov)
United States Fire Administration (www.usfa.gov)

