MONTECITO FIRE PROTECTION DISTRICT
FIRE PROTECTION PLAN

Section 5a

INSTALLATION REQUIREMENTS FOR RESIDENTIAL SPRINKLER SYSTEMS

It is the policy of the Fire District to require an approved residential fire sprinkler system in all new one and two family dwellings and townhouses as stipulated in the Code.

The Fire District also requires installation of residential fire sprinklers in the entire existing structure where 1000 square feet has been added to an existing residence and the total living space square footage total 3500 square feet or more. (The 1000 square feet added to an existing structure is an accumulative total including prior remodels / additions that followed the 1992 Montecito Fire Protection Plan adoption).

Separate buildings such as detached garages, cottages, auxiliary structures, that are located within 30 feet of the main structure shall be included in the overall accumulative total of gross square footage of the main residence.

This residential sprinkler standard is based upon the National Fire Code Standard 13D, 2010 Edition published by the National Fire Protection Association NFPA as such may be updated from time to time. The Fire District has made the following modifications and clarifications to the NFPA 13D Standard:

a. All connections to domestic water supply shall be made in accordance with applicable codes and standards of the County and any local water purveyor. An approved double check valve assembly shall be installed at system riser.

b. No work shall be covered up prior to field inspection. Property owner shall provide the Fire District 24 hours minimum advance notice for all field inspections. Property owner shall insure coordinate piping inspection / flow test to occur ahead of trades following (including insulation).

c. Property owner shall install non-threaded one-half inch hose bib at the remote test connection as an inspector's test valve and at the riser as a system drain valve. Any threads on these outlets are to be removed.

d. Sprinkler coverage shall include garage sprinkler coverage at one hundred square foot spacing intervals.

e. A single 212 degree upright sprinkler head shall be located within six inches of the roof ridge beam in each discrete attic area or at fifty foot maximum intervals along any main piping.

f. System shall hold a 200 psi pressure for a period of two hours.

g. Copies of Manufacturer's data for all installed system components shall be provided upon Fire District request prior to final system acceptance. All system components shall be installed following all manufacturer's guidelines unless specific relief is granted by the Fire Chief.

h. Sprinkler spray patterns shall not be obstructed and all head clearances shall be provided as required by NFPA 13D.

i. The sprinkler contractor shall provide the property owner with maintenance information as described in NFPA 13D. Property owner maintain the system consistent with these requirements.

j. System hydraulic design shall provide for an allowance of five gallons per minute for domestic demand.

k. An approved water hammer arrestor shall be installed on the sprinkler system riser.

l. Sprinkler system shall be monitored by an approved alarm service.

m. Any required shut off valves shall be chained and locked in the open position prior to final system acceptance.

n. Flow testing of system is required. Flow shall be measured for a thirty second flow period and shall conform to the manufacturer's listing criteria for the installed sprinkler heads. Contractors shall provide all equipment necessary for conducting test.

o. Approved shop drawings shall be maintained on the job site during all phases of system installation. Any field changes shall be noted on the drawings. The drawings shall be submitted to the Fire District prior to final Fire District approval.

p. Allow 24 hours minimum advance notice for the following required inspections:

1. Piping/flow test.
2. Final system acceptance

q. The following shall appear on each sheet of required shop drawings: “I certify that this sprinkler system is in full compliance with the design criteria of the Montecito Fire Protection Plan. This note shall appear along with the sprinkler contractor’s dated signature and seal.

r. All materials delivered to the job site shall be protected from the physical elements and damage. Any damaged, gouged, cut, scratched heads, pipe or fittings shall be removed and replaced.

s. No corrosive or self cleaning fluxes shall be used. Joints shall be wiped clean of excess flux and solder.

t. All piping running through studs or masonry shall be protected by elastomeric or plastic sleeves at three foot maximum intervals.

u. Nails are unacceptable as a means of securing hangers and supports. Piping shall be supported at the following maximum intervals:

1. Within six inches of all sprinkler drops
2. Within eighteen inches of all joints
3. Within four foot intervals on CPVC piping
4. Within six foot intervals on copper tubing

v. Heads shall not be located within eighteen inches of any lighting fixtures or HVAC diffuser grille.

w. Pendant head diffusers may be located a maximum of eight inches below the finished ceiling level. A three head design will be required for any system installed in barreled, coffered, exposed beam or cathedral type ceilings.

x. The property owner shall submit three (3) sets of plans, data sheets, and calculations for the proposed sprinkler system to the Fire District for review and approval prior to installation.

y. The system shall be operational prior to receiving final occupancy clearance.

z. An approved poppet type pressure relief valve shall be installed between the required backflow prevention device and the flow switch. Design pressure shall be no greater than 160 psi. A pressure regulator shall be installed where incoming pressures are in excess of 160 psi.