Sacramento Metropolitan Fire District
Community Risk Reduction Division

3012 Gold Canal Drive • Rancho Cordova, CA 95670 • Phone (916) 859-4330 • Fax (916) 859-3717

KURT P. HENKE
Fire Chief

SACRAMENTO METROPOLITAN FIRE DISTRICT					
FIRE PREVENTION STANDARD					
STANDARD TITLE:	**Installation of Residential Sprinkler Systems**				
STANDARD NUMBER:	21	EFFECTIVE DATE:	9/06/12	REVISION DATE:	01/31/13

To ensure that sprinkler plans submitted for review contain items necessary for approval prior to installation of systems in accordance with the 2010 edition of NFPA 13D, *Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes,* , and the 2010 California Residential Code.

This standard applies to all new or modified sprinkler systems in accordance with the 2010 edition of NFPA 13D, *Standard for the Installation of Sprinkler Systems in One- and Two- Family Dwellings and Manufactured Homes.* All individuals and companies who propose to engage in the installation or alteration of fire sprinkler systems are subject to the requirements of this standard and all other requirements of NFPA 13D, *Standard for the Installation of Sprinkler Systems in One- and Two- Family Dwellings and Manufactured Homes*, and the 2010 California Residential Code.

This standard outlines the procedure to be followed when submitting sprinkler plans and defines the District's requirements for sprinkler system installations that may be more restrictive or not included in existing codes and standards.

PROCEDURE

Procedures are numbered in accordance with NFPA 13D chapters or sections. Chapter or section numbers missing from this document indicate direct application of that chapter of NFPA 13D, *Standard for the Installation of Sprinkler Systems in One- and Two- Family Dwellings and Manufactured Homes,* 2010 edition, or the 2010 California Residential Code.

Section 4.2 – Hydrostatic Tests

1. The system shall be hydrostatically tested for leakage at a minimum pressure of 150 PSI, for a period of 30 minutes.

Chapter 6 – Water Supply

1. A system supplied by a well requires documentation (well report) to be provided from the civil engineer or well contractor indicating that the well and tank have the capacity to provide the sprinkler demand (volume and pressure) for a minimum of a 10-minute duration.

2. A system that requires a booster pump shall be designed so that the pump supplies both the fire sprinkler system and the domestic water system. The booster pump shall be energized by a dedicated electrical circuit.

3. Sprinkler systems in manufactured homes are the responsibility of the California Department of Housing and Community Development and are subject to the following:

   A. The seller of the manufactured home shall provide written verification that the site water supply is capable of providing the minimum flow (gallons per minute) and pressure (pounds per square inch), at the base of the fire sprinkler system riser, as indicated on the Fire Sprinkler Information Label, located in the water heater compartment.

      Note: In order to obtain a building permit, a Certificate of Release is required from the Fire District. The Certificate of Release cannot be issued without this information.

   B. The seller of the manufactured home shall provide written verification that the system has been installed, tested and approved by the California Department of Housing and Community Development.

      Note: The Fire District or the Building Department will not conduct the final inspection or provide the Certificate of Occupancy until this written verification is provided.

Section 8.5 – Piping Configuration

1. The piping configuration shall be designed to circulate water throughout and between each floor level by looping the piping system and maintaining minimal dead-end branch lines with a maximum length of 3 feet.

Exception 1: Systems where a reduced pressure principle backflow assembly is required by the water purveyor.

Exception 2: Systems supplied by a private well.

2. The piping configuration shall provide a ½-inch outlet connected to a remotely located water closet to facilitate water circulation. The piping shall be CPVC to clearly identify that the water closet is connected to the sprinkler system.

   Exception 1: Systems where a reduced pressure principle backflow assembly is required by the water purveyor.

   Exception 2: Systems supplied by a private well.

California Residential Code – Section 1.8.3

1. Sprinkler plans for new installations, system modifications, upgrades or other related items shall be submitted at the following location:

   Sacramento Metropolitan Fire District
   Community Risk Reduction Division
   3012 Gold Canal Drive
   Rancho Cordova, CA 95670
   (916) 859-4330
   8:00 to 3:00

2. A minimum of two sets of plans, hydraulic calculations and the manufacturer's material sheets shall be submitted. One set will be retained by the Community Risk Reduction Division and the other set will be returned to the contractor with a list of comments and/or corrections required. The approved set marked "Job Set" shall be maintained at the site where the work is being performed.

3. A C-16 license holder shall install all sprinkler systems. The licensed company or a registered engineer that is licensed and authorized for fire protection shall prepare plans. License numbers shall be shown on all copies of plans.

   Exception: 13D sprinkler systems designed and installed in accordance with owner-builder provisions of the California Business

and Professions Code, Section 7026.12. A signed copy of the Home Owner Exemption Letter (attachment 1) shall be provided upon plan submittal.

4. Installation shall not begin until plans have been approved.

5. Fees shall be paid at the time of submittal. Additional fees will be assessed for work performed prior to Fire District approval.

Ray Iverson, Assistant Chief / Fire Marshal

Attachment 1 - Home Owner Exemption Letter

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HOMEOWNER EXEMPTION LETTER

This fire sprinkler system is designed and will be installed in accordance with the owner-builder provisions of the California Business and Professions Code, Section 7026.12, which states:

The installation of a fire protection system, excluding an electrical alarm system, shall be performed only by a contractor holding a fire protection contractor classification as defined in the regulations of the board or by an owner-builder of an owner-occupied, single-family dwelling, if not more than two single-family dwellings on the same parcel are constructed within one year, plans are submitted to and approved by the city, county, or city and county authority, and the city, county, or city and county authority inspects and approves the installation.

Homeowner's Signature: _____

Homeowner's Printed Name: _____

Date: _____