# **Carlsbad Fire Department Fire Prevention Bureau**

## Guideline for Automatic Fire Sprinkler Systems in One- & Two-family Dwellings NFPA 13D



Approved and Authorized By: Randall Metz, Fire Marshal Issued: January 12, 2021

### Guideline for One & Two Residential Automatic Fire Sprinkler Systems NFPA 13D

#### **PURPOSE**

The intent of this guideline is to provide information necessary to ensure that the design and installation of automatic sprinkler systems in one & two family dwellings comply with applicable provisions set forth by 2019 California Fire Code (CFC), 2019 California Building Code, 2019 California Residential Code, and 2016 NFPA 13D, as adopted by the State of California, and locally adopted ordinances enforced by the city of Carlsbad, Office of the Fire Marshal (CFD).

#### **SCOPE**

This guideline provides specific requirements for the installation of automatic fire sprinkler systems, within one- & two-family dwellings.

#### **SUMBITTAL REQUIREMENTS**

#### 1. General Requirements

- A. Submit three (3) sets of legible, scaled plans with one (1) set of current and complete technical data sheets/manufacturer's specifications to Carlsbad Fire Prevention.
- B. Plans shall be submitted for approval to the City of Carlsbad before any equipment is installed or remodeled.
- C. Plans shall be drawn in accordance with NFPA 13D.

#### 2. Place the following notes verbatim on the plan

- A. Scope of work.
- B. One set of approved sprinkler plans with hydraulic calculations shall be retained at the job site at all times.
- C. The system shall be designed and installed in accordance with 2016 NFPA 13D and amendments as adopted by the local jurisdiction or California Residential Code.
- D. Documentation shall be provided upon request to demonstrate that the water supply, listed devices, and sprinkler coverage comply with the requirements of NFPA 13D.
- E. All valves shall have permanently affixed signs that designate their function.
- F. If waterflow alarms are provided, the water flow switch shall be connected to the service panel on an uninterruptable house circuit.

- G. If waterflow detection devices are installed, these devices, including the associated alarm circuits, shall be flow tested through the inspector's test connection and shall result in an audible alarm on the premises in accordance with 2016 NFPA 13D section 11.2.3.1.
- H. Underground mains and lead-in connections shall be flushed before connection is made to sprinkler piping.
- I. Water meter shall be installed prior to final.
- J. City of Carlsbad inspection required at both rough and final prior to occupancy being granted.
- K. Systems shall be tested at a minimum of street pressure in accordance with 2016 NFPA 13D section 11.2.1.1.
- L. All sprinkler piping shall remain uncovered until inspected by City of Carlsbad.
- M. Call Inspection Scheduling at (442) 339-2660 to schedule all inspections at least 48 hours in advance.