TOWN OF DUNBARTON RESIDENTIAL SPRINKLER
Revised 7-7-2022 by Fire Chief Jon Wiggin

The intent of this ordinance is -
To provide an alternative to constructing cisterns for new homes within subdivisions. The requirement of this residential sprinkler alternative are based on the NFPA 13D code.

Scope-
This ordinance covers the design and installation of automatic sprinkler systems for the protection against fire hazards in one or two family dwellings and manufactured homes. Where new dwellings are built with more than two (2) units, the NFPA 13-R standard shall apply.

Purpose-
The purpose of this ordinance is to provide a sprinkler system that aids in the detection and control of residential fires and thus provides improved protection against injury, loss of life, and property damage. A sprinkler system designed and installed in accordance with this ordinance is expected to prevent flashover (total involvement) in the room of fire origin, where sprinkled, and to improve the chances for occupants to escape or be evacuated. Guidelines have been established for the design and installation of sprinkler systems in one and two family dwellings and manufactured homes. Nothing in this ordinance is intended to restrict new technologies or alternative arrangements, provided that the level of safety prescribed by the ordinance is not reduced.

Process-
All sprinkler system designs shall be in accordance with the requirements of NFPA 13-D, as modified by this ordinance.

A set of plans must be submitted to the Building Inspector with an application for a building permit.

All required approvals shall be obtained prior to the installation of any sprinkler piping or components. Approval shall be by the Dunbarton Fire Department or their designee.

Any components of the sprinkler system, other than those required for domestic water supply, shall be installed by personnel licensed for such work.

Inspections during construction will be done by the Building Inspector, or his designee.

Acceptance testing/final test shall be performed in accordance with NFPA 25 “Sprinkler System Acceptance Test”. This test will require a flow test, observed by the Dunbarton Fire Chief or his designee, at the most hydraulically demanding head location.

Definitions: All definitions shall conform to NFPA 13-D unless otherwise approved.

Approved: For the purposes of this ordinance, approved shall mean acceptable to the Dunbarton Fire Department.

Sloped Ceilings: Those ceilings having a greater than 10 degree angle (17.6%) with a ceiling height greater than 9 feet.

System Storage: A reserve of water onsite, specific for the sprinkler system, calculated for the two most hydraulically demanding sprinkler heads to flow water for 10 minutes.

The sprinkler system for a dwelling containing sloped ceilings shall be based on a three-head system design and shall provide a minimum flow of 25 gallons per minute to the most hydraulically demanding head with a system minimum storage capacity of 250 gallons.

All other dwellings shall be of a two-head system design, and shall provide a minimum flow of 16 gallons per minute to the most hydraulically demanding head with a system minimum storage capacity of 160 gallons.

Bathrooms, of any size, are required to be sprinkled.

A fire department connection with iron pipe thread shall be installed and shall be maintained at all times and without obstruction by fences, bushes, trees, walls or any other object.

The sprinkler system shall activate the fire alarm system or the dwellings smoke detectors.

The attached garages or those that are located under living spaces shall be protected by the sprinkler system.

Maintenance: (Page 6, section 1-4 of NFPA 13D)
The owner is responsible for the condition of a sprinkler system and shall keep the system in normal operating condition.

Additional Requirement:
This ordinance allows for the installation of an approved residential sprinkler system to be installed in all dwellings of new subdivisions in lieu of cisterns. However, when the Dunbarton Fire Department deems that due to specific conditions, there is sufficient threat to life or property, it may recommend additional fire protection measures to be provided.

Notes: it is important to understand that during an electrical power outage the sprinkler system as required by 13D will not operate. This may be remedied by the installation of a self-contained system or a backup power supply.

Disclaimer:
The Town of Dunbarton and all agencies do not assume any liability due to a sprinkler system failure or malfunction or its inability to operate properly.