

## NFPA 13D System Installations in Townhomes

NFPA 13 D (Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes) 2010 Edition allows for the installation of a multipurpose piping system to serve the requirements of a combination domestic plumbing/fire sprinkler system.

NFPA 13D states in Section 1.1 Scope, the following:

1.1.1.1.1 This standard shall cover the design, installation, and maintenance of automatic fire sprinkler systems for protection against the fire hazards in one- and two-family dwellings and manufactured homes.

And in Section 3.3 General Definitions, the following:

3.3.3 Dwelling. Any detached building, or any part of a townhouse structure that is separated from the remainder of the townhouse structure with fire resistance rated assemblies in accordance with local building code, that contains no more than two dwelling units intended to be used, rented, leased, let or hired out to be occupied or that are occupied for habitation purposes.

3.3.4 Dwelling Unit. One or more rooms, arranged for the use of one or more individuals living together, as in a single housekeeping unit, that normally have cooking, living, sanitary, and sleeping facilities.

Laws & Rules: General Statutes Chapter 87, Article 2 and 21 North Carolina Administrative Code Chapter 50 of the State Board of Examiners of Plumbing, Heating & Fire Sprinkler Contractors states:

GS 87-21 (b)(1) In order to protect the public health, comfort and safety, the Board shall establish two classes of licenses: Class I covering all plumbing, heating and fire sprinkler systems for all structures, and Class II covering plumbing and heating systems in single-family detached residential dwellings.

### 21 NCAC 50.0516 Residential Fire Sprinkler Installation License

License in the Residential Fire Sprinkler Installation Contractor classification is required of persons who engage in the business of contracting to perform or performing the installation of multipurpose single family residential water-based plumbing and fire sprinkler piping systems consistent with NFPA-13D. All multipurpose single family residential plumbing and fire sprinkler piping systems are required to be hydraulically calculated and designed by a licensed North Carolina Fire Sprinkler Installation Contractor or a North Carolina License Professional Engineer for each specific installation. Residential Fire Sprinkler Installation Contractors are required to perform each installation consistent with the calculation and design. Any single purpose single family residential water-based fire sprinkler system shall be installed by a license Fire Sprinkler Installation Contractor.

A licensee holding a Plumbing Contractor, **Class II** license and a Residential Fire Sprinkler Installation Contractor license (P-II, RFSC) can install 13D systems **only in single-family detached** residential dwellings: Examples: Single family detached site-built home or single family detached manufactured home.

A licensee holding a Plumbing Contractor, **Class I** license and a Residential Fire Sprinkler Installation Contractor license (P-I, RFSC) can install 13D systems in **any one- or two-family dwelling**. Examples: One-or two-family detached site-built home, one- or two-family detached manufactured home, or single family townhomes built in accordance with the local building code.

Residential fire sprinkler systems installed in buildings with **three or more** dwelling units (including triplex, quadplex, etc.; condominiums, or hotel/motel type occupancies) must be installed by a Fire Sprinkler Installation Contractor (FS) licensed by the Board.