

## **Department of Permitting Services Division of Commercial Building Construction**

2425 Reedie Drive, 7th Floor, Wheaton, MD 20902

## CODE INTERPRETATION/POLICY

Code/Year Section of Code

IBC 2021 Edition
& ER 13-24 903.3.1.2

Title of Code Section/Subsection/Policy

NFPA 13R Sprinkler Systems

## Statement/Background of Issue:

Montgomery County is currently under the 2021 International Building Code (IBC) as adopted under Executive Regulation (ER) 13-24, effective December 10, 2024; superseding the previous adoption of the 2018 edition of the IBC under ER 31-19. There is a significant code change from the 2018 IBC to the 2021 IBC in regard to Section 903.3.1.2 NFPA 13R sprinkler systems, and the criteria for which an NFPA 13R sprinkler system is permitted to be installed.

Section 903.3.1.2 in the 2018 IBC permits an NFPA 13R sprinkler system to be installed in Group R occupancies up to and including four stories in height in buildings not exceeding 60 feet in height above grade plane. It also indicates that Group R occupancies constructed in accordance with Section 510.2 and 510.4 are to be measured from the horizontal assembly creating separate buildings. Section 903.3.1.2 changed in the 2021 edition of the IBC to allow the installation of an NFPA 13R sprinkler system in Group R occupancies where the Group R occupancy meets all of the following conditions:

- 1. Four stories or fewer above grade plane.
- The floor level of the highest story is 30 feet (9144 mm) or less above the lowest level of fire department vehicle access.
- 3. The floor level of the lowest story is 30 feet (9144 mm) or less below the lowest level of fire department vehicle access.

The 2021 IBC also indicates the number of stories of Group R occupancies constructed in accordance with Section 510.2 and 510.4 shall be measured from grade plane.

This code change reduces the maximum building height where an NFPA 13R sprinkler system is permitted; and the story height measuring point has been changed to grade plane where the podium provisions of Section 510 are applied. These changes address concerns of unsprinklered attic areas of combustible construction being at a higher and more difficult level for the fire department to reach or defend; as well as, provide a single scoping limit for both standpipes and NFPA 13 sprinkler systems with the more restrictive 30 ft maximum height limitation.

Four story townhouses fall under the scope of the IBC per Section 101.2. Because of this, Section 903.3.1.2 is applicable to four story townhouses; and although the concerns surrounding the code change would not be applicable, an NFPA 13 sprinkler system may be required under the 2021 IBC.

## **Division Interpretation/Policy:**

Automatic sprinkler systems in one- and two-family dwellings and townhouses up to and including three stories in height shall be permitted to be installed in accordance with NFPA 13D or 13R. Automatic sprinkler systems in one- and two-family dwellings and townhouses four stories in height in buildings not exceeding 60 feet in height above grade plane shall be permitted to be installed throughout in accordance with NFPA 13R. A fire department connection is not required for a townhouse, or one- and two-family dwellings. An NFPA 13R sprinkler system is intended as a life safety system and will continue to be permitted in four story townhouses as stipulated. This does not apply to use groups R-1 or R-2 as defined in the Montgomery County Building Code.

Interpretation/Policy No.	Date	John Catlett John D. Catlett
BCP 25-01	June 13, 2025	Fire Marshal Pastora Warnick