

NFPA 13R Sprinklers - Is your building fully sprinkler-protected?

The goal of NFPA 13R fire protection systems is to save lives, not to save buildings.



Comparing **NFPA 13R** and *NFPA 13* fire protection can be a confusing task, which is complicated further by their similar names. **NFPA 13R**-designed fire protection is protection that can greatly aid in fire life safety. These systems are allowed in certain residential buildings that are up to four floors, and under 60' in height. While **NFPA 13R** fire protection is designed for fire life safety, it does not provide adequate building protection.

NFPA 13 fire protection systems are designed to provide a high level (perhaps the highest level) of fire life safety protection for the occupants. These systems also protect the building.

When building or purchasing a low-profile habitational facility, a business may select an **NFPA 13R** system design due to the lower cost and allowance by local code. These sprinkler systems, on average, deliver 50% less water because they are designed with a different purpose than to save your building; they are intended to save lives. Insurers often do not provide sprinkler credits for **13R** protection. This increases the long-term carry costs for the property.

NFPA 13R systems slow the development of a fire by wetting combustible materials commonly found in a residential setting: upholstered furniture, drapes, beds and flooring. Slowing fire development allows inhabitants additional time to escape. However, sprinkler protection is only installed in the living spaces; it is not provided in uninhabited areas such as attics and balconies.

Partial building protection and lower water delivery rates render **NFPA 13R** systems as life safety sprinkler systems that cannot reliably control fire growth. Effective fire control, allowing time for fire fighters to arrive and extinguish the blaze, is necessary to save the building. Effective fire control is delivered by higher density, *NFPA 13* sprinkler systems.

Key Differences Between NFPA 13R and NFPA 13

NFPA 13R
■ Attic is not sprinklered
■ 1 to 4 heads in design area
■ .05 density minimum
■ Designed for life safety
■ 4-story residential - no more than 60' height
■ Hose demand not required (but may be listed)
NFPA 13
■ Attic is sprinklered
■ 4+ heads in design area
■ .10 density minimum
■ Designed for property protection
■ No building height limit
■ Hose demand is required

Business Risk:

Higher flowing sprinkler systems, designed to *NFPA 13* “light hazard” standards, control a building fire and are intended to save the property and save lives. *NFPA 13* systems are designed to keep a fire under control until firefighters arrive. In some instances, they extinguish the blaze by themselves, simply because they deliver more water.

Business Solutions:

When buying or building a low-profile habitational property, learn the following details about the existing or planned sprinkler protection systems:

- When you are building low-profile property, is your contractor ensuring the property is fully protected by a *NFPA 13* design system?
- When you are buying a low-profile property, you should require details from the current owner about the sprinkler system:
 - How much of the property, including attics and concealed spaces, does it protect?
 - Is it designed to protect a light-hazard occupancy in all residential areas?
 - Is it designed for additional adjacent spaces, such as mechanical penthouses, parking garages and mercantile operations housed inside the same structure?
- Seek *NFPA 13*-designed protection to save both property and people.
- All sprinkler systems must be periodically inspected and maintained. They should be monitored by an alarm company to summon emergency responders in the event of a fire. Your Nationwide Loss Control associate can guide you in this matter.

Additional Resources:

[NFPA Article on Sprinkler Safety](#)

[NFPA Video: Differences between NFPA 13R and NFPA 13](#)

Providing solutions to help our members manage risk.®

For your risk management and safety needs, contact Nationwide Loss Control Services: 1-866-808-2101 or LCS@nationwide.com