



**MJ INSURANCE**  
SORORITY DIVISION

## Automatic Sprinkler System Update: NFPA 13R

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The ruling body for commercial buildings fire safety codes is the National Fire Protection Association or NFPA as it is commonly referred. This entity determines the fire safety codes and is the recognized standard by which all businesses are to follow. This includes the fraternity and sorority chapter houses on college campuses.

It is the NFPA that sets the codes for the types of sprinkler systems that must be or can be installed in a building primarily based on its occupancy. In 1896, they developed the first code for systems in residential or habitational type occupancies NFPA 13.

NFPA 13 is designed to serve two distinct purposes:

To eliminate the risk of bodily injury or death of residents/guests

To significantly reduce fire damage to the property and any subsequent water damage from the fire response efforts

The building must be 100 percent sprinklered including attic space whether accessible or not. The costs to install can be substantial for the following:

Piping must be steel which is more labor intensive to fabricate

Attics must be also be sprinklered

Aesthetic work is more substantial with the exposed steel pipes

For a variety of reasons such as cost and labor, the NFPA came out in the 1970's with a modified code for residential housing, the NFPA 13R (Residential) Code. The main purpose of this risk management tool was purely the protection of lives, unlike NFPA 13 which also was protecting the physical property and thus has substantial benefits to the property exposure.

A criterion for the residential housing qualification was that the structure had to be less than four stories in height. As such, the sorority chapter houses did qualify for NFPA13R status, with the only caveat being the attics were not to be used for any purposes and were to have limited access to the attic space by the residents.

When the interest for sprinkler systems began to escalate, we were successful in getting the insurance company to provide substantial credits for a property that met the NFPA 13R code. A credit of 40 percent is applied to your locations property premium. Even though the primary benefit was life safety or the liability exposure, the insurance company agreed to apply this credit to the property premium:

As generally 57 percent of the account premium is for the property exposure whereas the liability was only 15 percent thus the dollar discount was far more substantial

As an inducement to get the property owners to budget for a sprinkler system

To support the best risk management tool for life safety of your members, employees and guests

Over the years, we have seen an exposure emerge which has become a challenge; that being the very fact that the chapter house attics aren't sprinklered. In the MJ Sorority Program, of the six property fires over \$100,000 in claim costs, four of them started in the attic which was unsprinklered and had no other type of fire detection system present.

The biggest problem comes from the fact that the fire burns for some time in the attic and/or roof area, and it isn't until it burns through the attic flooring for the debris to land on the next floor before the sprinkler system is engaged and the fire department is alerted. The second problem then comes when the fire department gets there and has to release a lot more water than normal to extinguish the fire because the fire has been burning longer. Thus you have more of your building damaged by the fire and more water damage in trying to put it out.

The liability insurance company underwriters are still very pleased that there is reduced, if not completely eliminated bodily injury exposure, but the property underwriters are growing concerned about the exposure as we have seen it develop.

The obvious solution to this dilemma is to install sprinklers in the attic but suffice it to say that this would be virtually impossible for primarily cost reasons. We have done extensive research on this matter and can reach no other conclusion.

We can however recommend another solution to the fire protection alert delay that presently exists. That recommendation is installing a "heat sensor" to your existing fire alarm system in the attic space. With the sudden rise in the temperature in the attic (beyond just the summer heat), the fire department gets alerted to a fire much faster and there is ultimately less property damage.

Attached you will find some additional information on heat sensors for your reference. In the future, we do anticipate that this will be required as an additional tool in the chapter houses to maintain the property sprinkler credit in the future. We will use this time to promote this tool and the ultimate requirement in the renewal communication and our newsletters so everyone is made aware and can budget accordingly.

Therefore, we are recommending that you **not seek to comply with the sprinkler recommendation for the attic space of your property** but pursue the installation of the heat sensor instead.

Should you have any questions on the above information, feel free to contact Heidi Lewis, Senior Account Executive at [heidi.lewis@mjsorority.com](mailto:heidi.lewis@mjsorority.com).