

Fire and Life Safety Recommendations for MHPS High School Superstructure

as compiled and prepared by the Mountain Home Fire Department

1. Increased advance detection as per NFPA 72, 2019 edition
Currently there is one reflective beam smoke detector located in the superstructure (Big Top) at the Mountain Home High School. The maximum area that the current detector can cover and monitor is 19,800 sq ft under ideal conditions. Ideal conditions would be a flat, smooth horizontal ceiling with no interruptions such as exposed support beams. The approximate total area in the superstructure is 43,000 sq ft. Considering the obstructions in the area, a minimum of 4 additional Reflective Beam Smoke Detectors is recommended. A data sheet on the model currently installed is included.
2. Increased ventilation and smoke control as per NFPA 92, 2021 edition
Currently there is one scuttle hatch that would allow removal of smoke and heated gases from the superstructure to facilitate firefighting operations. Additional smoke vents are recommended. These can be activated by various methods such as a fusible link and have opening springs strong enough to open against a snow load of up to 10 psf. Data sheets on different models are included.
3. Recommendations for work and maintenance being performed in the superstructure
Hot work is defined as: *Operations including cutting, welding, Thermit welding, brazing, soldering, grinding, thermal spraying, thawing pipe, installation of torch applied roof systems or any other similar activity.*
 1. All hot work operations shall comply with chapter 35 of the Arkansas Fire Prevention Code 2021 edition.
 2. The company or personnel performing the work shall notify the Mountain Home Fire Department at least 24 hours before any hot work begins.
 3. All combustibles in the area of hot work must be protected.
 4. A fire watch must be conducted by a representative of the contracting company during hot work activities until 30 minutes after the work is completed.
 5. A fire extinguisher with a rating of at least 3A40BC shall be present at all times the hot work is being performed.
4. Smoking or vaping or any other activity utilizing a flame or ignition device is strictly prohibited.

Please let us know if we can be of further assistance.

Respectfully,

Shawn Lofton
Fire Marshal
Mountain Home Fire Department

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