

High-Rise Building

Case Study



Location:
New York, NY, USA

Challenge:
Provide fire suppression for fuel oil storage areas that supply backup generators in a high-rise building

Product Solutions:
ANSUL closed-head foam-water sprinkler and bladder tank system containing ANSULITE 3% AFFF

Application:
Total area of 933 ft² (86.68 m²) for two storage locations

High-rise buildings pose unique fire suppression challenges. Backup generators are located throughout the building to supply power to the facility in emergency situations. Diesel fuel oil storage areas utilize pump systems to supply fuel to run the backup generators.

Two fuel oil storage areas located in the corporate headquarters of a major broadcasting network required a fire suppression system that could suppress a fire and help prevent it from spreading to other areas of the building. The ideal solution for this application was an ANSUL closed-head foam-water sprinkler system used in conjunction with a FLOWMAX wide-range proportioner, ANSUL bladder tank and ANSULITE 3% Aqueous Film-Forming Foam (AFFF).

Used with a bladder tank system, the proportioner controls the mixing of the foam concentrate into a flowing water stream over a wide range of flow rates and pressures. Because of its low flow capability, this proportioner is especially suited for the closed-head foam-water sprinkler application. The system flow starts out low, but if the fire intensifies, more sprinklers will open, increasing the flow rate. The balanced pressure bladder tank system offers an added benefit as bladder tanks require little maintenance and are less expensive than alternatives such as self-contained compressed-air foam systems (CAFS).

Intended for use on Class B hydrocarbon fuel fires, ANSULITE 3% AFFF forms an aqueous film that helps prevent the release of fuel vapor. Additionally, the foam blanket effectively excludes oxygen from the fuel surface and the water content of the foam provides a cooling effect. The complete system is composed of UL Listed equipment and meets NFPA standards.