

Overheat and Fire Detection in Self-Storage Warehouses

The origins of self-storage go back over 40 years when crude makeshift buildings began housing the belongings of migratory workers and seasonal tourists. The industry has grown as the economy has expanded and we have become an increasingly mobile society. With thousands of properties and millions of square feet under roof, this has become another natural application for Protectowire Linear Heat Detector and its unique properties.

There are several elements intrinsic to self-storage that make Protectowire Linear Heat Detector more attractive than other types of detection such as sprinklers and spot type heat or smoke detectors. By definition, self-storage means that individuals renting the spaces or cubicles can enter, store their property, then lock their spaces at will. If spot heat or smoke detectors are installed, the renter must be asked to open their spaces for normal maintenance and testing operations. If a sprinkler system is installed, each building must have its own standpipe; also, such systems often require expensive tanks and pumps in order to meet code or to overcome local water supply inadequacies.



Photos taken at: Fortress Secure Mini-Storage Arroyo Grande, CA, U.S.A.

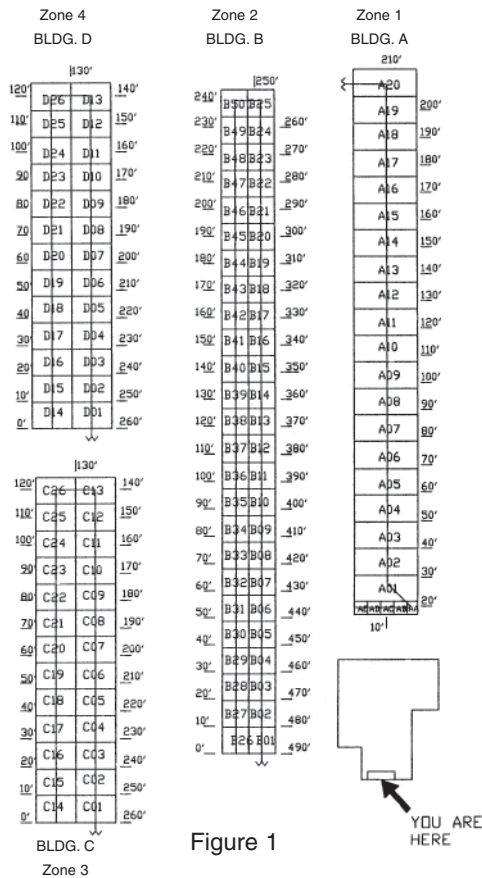


Figure 1



Protectowire
Linear Heat Detector

Due to its linear nature, the entire length of Protectowire is a fixed temperature heat detector. This unique characteristic allows the Detector to be installed longitudinally in each building thereby covering each individual storage compartment. To determine the alarm location, a Protectowire FireSystem 2000 Control Panel with Alarm Point Location Meter is used. By referencing the linear distance of the alarm point displayed on the meter to the footage represented in each cubicle as noted on a facility site plan (Figure 1) mounted next to the control panel, the location of the alarm condition can be easily identified. For example, if the system indicates an alarm in Zone 1 and the meter reads 170 feet, one would know that Building A, Space 16 is the location of the alarm source.

Perhaps as important as these features is the low maintenance aspect of Protectowire Linear Heat Detector. NFPA 72 allows for a non-destructive test of Protectowire, so instead of individual renters being subject to the inconvenience of having to unlock their spaces for inspection or testing of the fire alarm system, a simple end-of-line test switch can be activated to test the integrity of each detection zone thereby reducing costs.



FireSystem 2000
Control Panel