



OPERATIONAL REQUIREMENTS FOR INSTALLATION & MONITORING FIRE MARSHAL'S OFFICE

These guidelines shall be adhered to when a building, or facility, within the City of Keller is provided with an approved, automatic fire sprinkler system and/or fire alarm system. All fire sprinkler system and fire alarms for the purposes of this guideline and any other guidelines or requirements of the Fire Department shall conform to the 2021 International Fire Code, as adopted and amended by City of Keller and the most current Edition of NFPA 72.

FIRE ALARM/SPRINKLER SYSTEM MONITORING OPERATIONAL REQUIREMENTS

1. Conventional, or zoned, fire alarm control panels and initiating devices are not permitted.
2. A DACT, including two independent means of transmission shall be provided to retransmit an alarm signal to the designated monitoring center. **It is the responsibility of the fire alarm contractor to confirm the status of any landline PRIOR to submittal.** When 100% copper landlines are not available, two cellular communicators are approved for use as the primary and backup means of communication. The cellular communicators shall be two different network providers in order to meet the NFPA 72 requirement for two independent means of communication. **One Dual path communicator does not satisfy the requirement for two independent means of alarm transmission.** [Reference 2021 IFC Section 907.1.4 as Amended and Adopted and 2022 Edition NFPA 72 Sections 26.6.3.2, 26.6.3.4 and 26.3.6.6]
3. All fire alarm systems shall be installed in such a manner that a failure of any single initiating device or single open in an initiating circuit conductor will not interfere with the normal operation of other such devices. All signaling line circuits (SLC) shall be installed in such a way that a single open will not interfere with the operation of any addressable devices (Class A). Outgoing and return SLC conductors shall be installed in accordance with NFPA 72 requirements for Class A circuits and shall have a minimum of four (4) feet separation horizontal and one (1) foot vertical between supply and return circuit conductors. The initiating device circuit (IDC) from a signaling line circuit interface device shall be wired Class A, provided the distance from the interface device to the initiating device is ten feet or less. All wiring, SLC, IDC, NAC shall be wired Class A. Minimum fire alarm design shall include a manual pull station at each exit and notification devices throughout. [Reference 2021 IFC Section 907.6.1.1]
4. A single weatherproof exterior audible/visible notification device shall be provided on the exterior of the building and shall be located above the Fire Department Connection (FDC). This device shall be a minimum of 75 candela.
5. Full occupant notification including Horns/Strobes throughout and Pull Stations at all required exits shall be provided as required by 2021 IFC Section 202, 907.6.1.1 and 907.2 as Amended and Adopted
6. Activation of the kitchen hood suppression system shall cause an alarm condition on the fire alarm panel. [Reference 2021 IFC Sections 904.3.4 and 904.3.5]
7. All new and/or existing Duct detectors in HVAC units over 2000 cfm shall cause a supervisory signal on the alarm panel and receive its power from the fire alarm control panel. . [Reference 2021 IFC Section 907.2.13.1.2]
8. All valves controlling the water supply for automatic sprinkler systems, including backflow preventers, and water-flow switches on all sprinkler systems and standpipe systems, with the exception of fire department hose connections, shall be electronically supervised.
9. Alarm, supervisory and trouble signals shall be distinctly different and shall be automatically transmitted to an approved Central Station listed by Underwriters Laboratories, or when approved by the code official, at a constantly attended location
10. The time delay feature on the waterflow switch switches must be set to a delay of not less than 45

seconds and no more than 70 seconds.

11. Waterflow alarms shall be programmed non-silenceable.

12. The exterior horn/strobe shall operate on waterflow alarm only.

13. The exterior notification device shall be non-silenceable.

14. The exterior notification device shall be wired from the fire alarm control panel as a dedicated latching circuit. The notification device is not permitted to be wired from the waterflow switch, powered from 120 VAC, operated by a control relay or provided on an unsupervised circuit and shall be supervised.

ADDRESSABILITY REQUIREMENTS

15. All alarms are required to be transmitted to the U.L. Listed Central Station monitoring company with the device(s) designation and location, or addressable device identification. (i.e., a waterflow device must be listed as waterflow (multiple sprinkler risers shall be differentiated), smoke detector must be listed as a smoke detector second floor room 225, pull station as pull station main lobby)

16. Alarms shall not be transmitted as a "General Alarm" or "Zone" condition. This information must be in turn, transmitted to the Keller 911 Dispatch Center, with correct designation. This is commonly referred to as POINT ID or CONTACT ID.

17. New installations and modifications that change a fire alarm system from sprinkler monitoring to full occupant notification require a 24 hour battery test prior to scheduling the acceptance test. Alarm contractors are required to provide their own AMP hour reader for this test.

The above operational and monitoring requirements shall not be considered as absolutes. Additional monitored signals and/or operations may be necessary based upon the hazard, configuration, occupancy or other conditions or configurations as deemed necessary by the Fire Code or the Keller Fire Marshal's Office.