

Table 8.1: General Requirements of Fire Detection and Alarm Systems

ITEMS	REQUIREMENTS
14. FIRE ALARM CONTROL PANEL (FACP)	<u>4. DETECTION DEVICES-ALARM SIGNAL INITIATION</u>
	i. A smoke detector that is continuously subjected to a smoke concentration above alarm threshold does not delay the system functions by more than 1 minute.
	<u>5. SPRINKLER SYSTEM (WATER FLOW SWITCH) -ALARM INITIATION</u>
	i. Waterflow alarm-initiating devices from sprinkler system shall be connected to a dedicated function fire alarm control unit designated as “sprinkler waterflow and supervisory system,” and permanently identified on the control unit and record drawings.
	ii. Where waterflow alarm-initiating devices are connected to a building fire alarm system, a dedicated function fire alarm control unit shall not be required.
	iii. The number of waterflow alarm-initiating devices permitted to be connected to a single alarm initiating device circuit shall not exceed five.
	iv. Activation of the initiating device (Water Flow Switch) shall occur within 90 seconds of waterflow at the alarm-initiating device when flow occurs that is equal to or greater than that from a single sprinkler of the smallest orifice size installed in the system.
	v. Movement of water due to waste, surges, or variable pressure shall not initiate an alarm signal.
	<u>6. SPRINKLER SYSTEM (WATER FLOW SWITCH) -SUPERVISORY SIGNAL INITIATION</u>
	i. Supervisory signal-initiating devices shall be connected to a dedicated function fire alarm control unit designated as “sprinkler waterflow and supervisory system,” and permanently identified on the control unit and record drawings.
	ii. Where supervisory signal-initiating devices are connected to a building fire alarm system, a dedicated function fire alarm control unit shall not be required.
	iii. The number of supervisory signal-initiating devices permitted to be connected to a single initiating device circuit shall not exceed 20.
	<u>7. FIRE PUMP -ALARM INITIATION</u>
	i. A pump running signal shall be permitted to be a supervisory or alarm signal.
	<u>8. OTHER FIRE SUPPRESSION SYSTEMS -ALARM INITIATION</u>
	i. The actuation of a fire suppression system shall annunciate an alarm or supervisory condition at the building fire alarm control unit.