Requirements for Sprinklers and Fire Initiating Devices
The reason for any deviation from these requirements must be provided by the local fire authority to OPS in writing

**SPRINKLERS**

ASME A17.1-2019 – Sec 2.8.3.3
SPRINKLERS ALLOWED:
- In machine Room/Space
- In hoistway
- Must conform to NFPA 13

**FIRE INITIATING DEVICES**

ASME A17.1-2019 – Sec 2.27.3.2

DEVICES REQUIRED to initiate Phase 1 Recall:
- In each lobby served by an elevator
- In machine Room/Space
- In hoistway when sprinklers are present
- Must be installed according to NFPA 72

**NFPA 13-2019**

**TRACTION ELEVATOR**

SPRINKLERS REQUIRED in pit unless:
Sec 9.3.6.2
- Elevator hoistway is non-combustible and doesn’t contain hydraulic fluid

SPRINKLERS REQUIRED in machine room and top of hoistway unless:
Sec 9.3.6.3
- Area is dedicated to and only used to store elevator equipment
- Protected by smoke detector or other automatic fire protection per NFPA 72
- Separated by fire rated construction Sec 9.3.6.7
- Non-circular suspension means (belts), if present, meets UL 62 FT-1 rating

**HYDRAULIC ELEVATOR**

SPRINKLERS REQUIRED in pit:
Sec 9.3.6.1

**SHUNT TRIP**

ASME A17.1-2019

Sec 2.8.3.3.2
If sprinklers could affect the elevator operation, a “means” (heat detector or flow switch) complying with NFPA Sec 21.4 are required to automatically disconnect mainline power (shunt trip) upon or prior to the application of water.

**NFPA 72-2019**

Sec 21.2 and 21.3
- Emergency control interface must be within 3 ft (1 m) of component controlling function
- Wiring between control unit & emergency control interface must be Class A, B, D, N or X
- Smoke detectors must be listed for the environment
- Heat detectors may replace smoke detectors in pits & hoistways & shall replace smoke detectors in un-sprinkled hoistways
- If ambient conditions prohibit use of smoke detector, heat detector is permitted
- Connected to fire command or designated as fire recall control
- Only lobby, machine room and hoistway device shall recall elevator
- Smoke detectors shall be located in lobby, 21 ft from centerline of each elevator within a bank
- Upon activation of water, visual annunciation at fire control & elevator
- Visual warning at building control or fire control unit
- AHJ approval = supervisory signal instead of alarm signal

**NFPA 13-2019**

SPRINKLERS ALLOWED in machine Room/Space
- In each lobby served by an elevator
- In machine Room/Space
- In hoistway when sprinklers are present
- Must be installed according to NFPA 72

**NFPA 72-2019**

Sec 21.4
- Heat detectors used to shunt shall have lower temp and higher sensitivity than sprinklers
- When a heat detector is used in hoistway, there may be a delay in activation of the shunt trip to allow the car to return to the designated level prior to water initiation