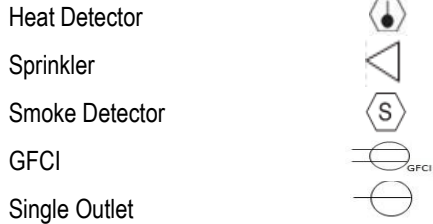


Hydraulic Elevator

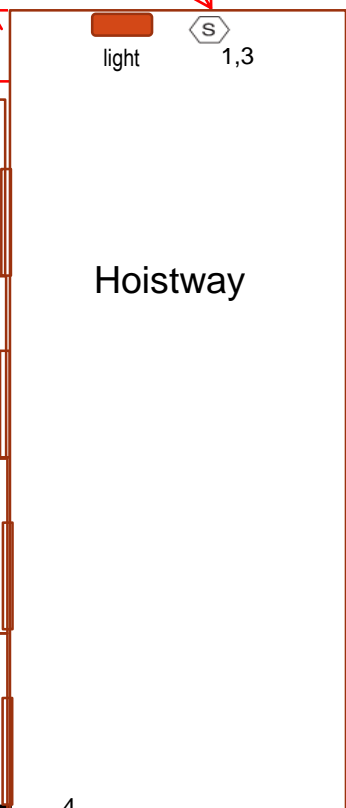
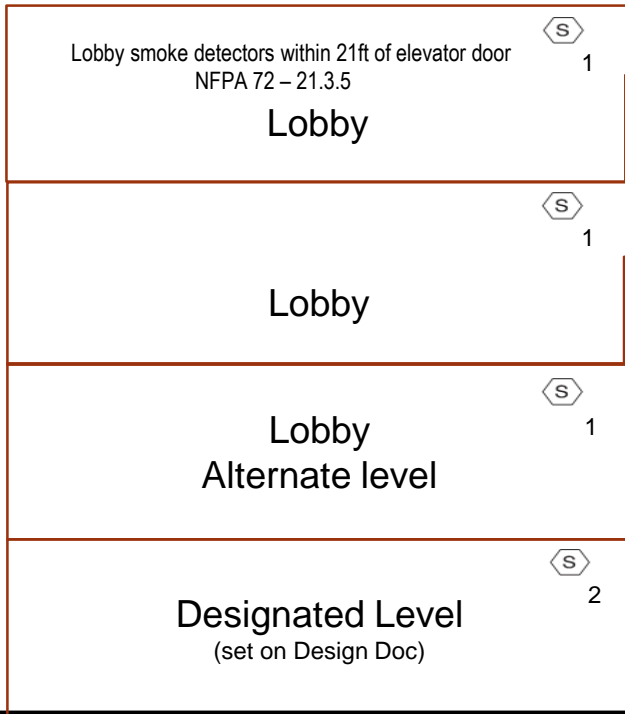
2013 NFPA 13 --- 2013 NFPA 72 --- 2014 NEC --- 2007 ASME A17.1,

Call the office if you encounter something that doesn't seem right or the hoistway or cab is suspected to be combustible.

Sprinkler & Shunt Trip Heat detector at the top of the elevator hoistway **are not** required for noncombustible elevator shafts/cabs. Smoke detector is allowed **only** for smoke relief function: NFPA 13 - 8.15.5.6 NFPA 72 -21.3.6



Top of Car Clearance is 43" from top of car to the first obstruction



Detector Operations

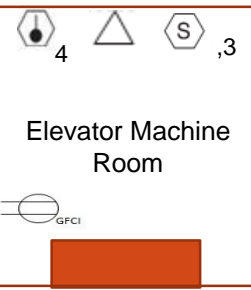
- 1 – Recall to Designated Level
- 2 - Recall to Alternate Level
- 3 – Flash FF Helmet in car
- 4 – Shunt trip power disconnect

Pit Electrical NEC 620. 21-24

- Pit is **NOT** considered a wet location unless sprinklered.
- Wiring Methods
 - RGC, IMC, EMT
 - Rigid non-metallic
- Pit Maint Recept. GFCI Dedicated Circuit
- Pit Light & Switch can be connected to the load side of the GFCI receptacle.
- Test receptacle -light should stay on.

Elev. Equip. Room

- Sprinkler Required
- Heat for Shunt trip
- Smoke for Recall
- NFPA 13, 8.15.5.3



Sidewall sprinklers shall be installed at bottom of hoistway not more than 2 feet above the pit floor, but is not required for noncombustible elevator shafts that do not contain combustible hydraulic fluids. (most fluids are combustible, so assume a sprinkler is required). NFPA 13 - 8.15.5.1, NFPA 13 - 8.15.15.2

Pit electrical is required to be weather proof because of the sprinkler. ASME 2.8.3.3.4

Pit ladder required if pit is greater than 35" in depth. Handrail provided 48" above the landing

24"max

Sump pump





- min. 3000 gph or 50 gpm
- Secured, covered, level w/ pit floor
- Separate circuit req. GFCI unless single outlet.

Traction Elevator

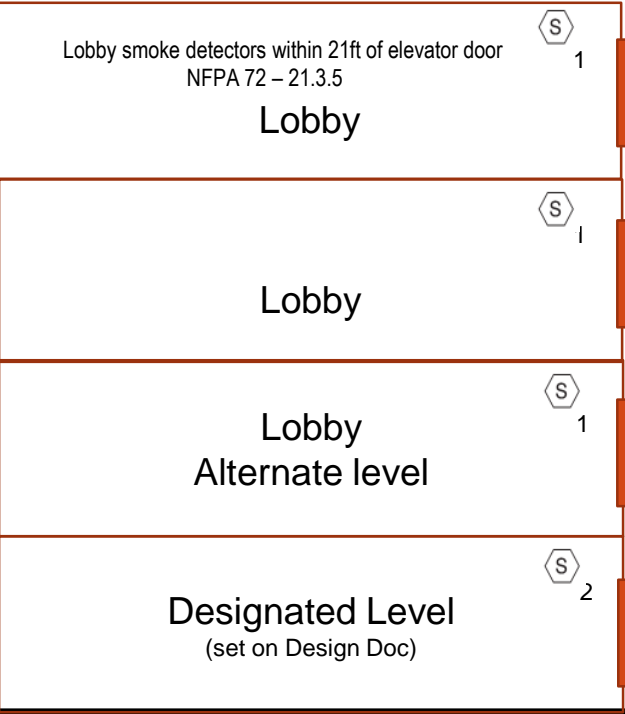
2013 NFPA 13 --- 2013 NFPA 72 --- 2014 NEC --- 2007 ASME A17.1,

Call the office if you encounter something that doesn't seem right or the hoistway or cab is suspected to be combustible.

Smoke only for recall Elev. equip. only - no storage Fire Rated Separation, NFPA 13, 8.15.5.3

- Heat Detector 
- Smoke Detector 
- GFCI 
- Single Outlet 

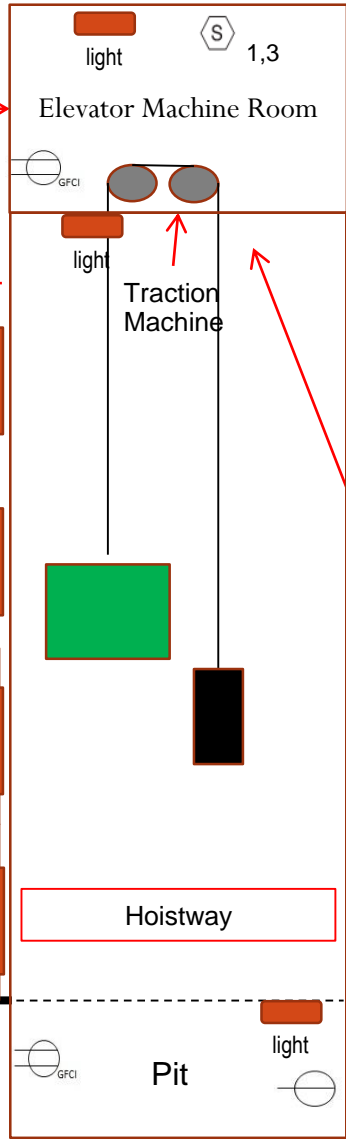
Top of Car Clearance is 43" from top of car to the first obstruction



- Detector Operations**
- 1 - Recall to Designated Level
 - 2 - Recall to Alternate Level
 - 3 - Flash FF Helmet in car
 - 4 - Shunt trip power disconnect

- Pit Electrical NEC 620. 21-24**
- Pit is **NOT** considered a wet location unless sprinklered
 - Wiring Methods
 - RGC, IMC, EMT
 - Rigid non-metallic
 - Pit Maint Recept. GFCI Dedicated Circuit
 - Pit Light & Switch can be connected to the load side of the GFCI receptacle.
 - Test receptacle -light should stay on.

Pit ladder required if pit is greater than 35" in depth. Handrail provided 48" above the landing



Hoistway

Sprinklers shall be installed at the top and bottom of elevator hoistways where elevators utilize combustible suspension means such as noncircular elastomeric-coated or polyurethane coated steel belts and heat detectors.

Sprinkler & Shunt Trip Heat detector at the top of the elevator hoistway **are** required for combustible elevator shafts/cabs/suspension.

Smoke detector may be required for smoke relief function. NFPA 13 - 8.15.5.6 NFPA 72 -21.3.6





- Sump pump**
- min. 3000 gph or 50 gpm
 - Secured, covered, level w/ pit floor
 - Separate circuit req. GFCI unless single outlet.



Machine Room - Less Elevator

2013 NFPA 13 — 2013 NFPA 72 — 2014 NEC — 2007 ASME A17.1

Call the office if you encounter something that doesn't seem right or the hoistway or cab is suspected to be combustible. .

- Heat Detector 
- Smoke Detector 
- GFCI 
- Single Outlet 

Detector Operations

- 1 – Recall to Designated Level
- 2 - Recall to Alternate Level
- 3 – Flash FF Helmet in car

Pit Electrical NEC 620. 21-24

- Pit is **NOT** considered a wet location unless sprinklered
- Wiring Methods
 - RGC, IMC, EMT
 - Rigid non-metallic
- Pit Maint Recept. GFCI Dedicated Circuit
- Pit Light & Switch can be connected to the load side of the GFCI receptacle.
- Test receptacle -light should stay on.

Top of Car Clearance is 43" from top of car to the first obstruction

Lobby smoke detectors within 21ft of elevator door
NFPA 72 – 21.3.5

Lobby

Lobby

Lobby
Alternate level

Designated Level
(set on Design Doc)

light  S 1,3



Hoistway

Smoke detector **is** required above the traction machine as this is now a machinery space. NFPA 13 - 8.15.5.6 NFPA 72 -21.3.6

Machinery Space

Hoistway

Sprinklers shall be installed at the top and bottom of elevator hoistways where elevators utilize combustible suspension means such as noncircular elastomeric-coated or polyurethane coated steel belts and heat detectors.

Sprinkler & Shunt Trip Heat detector at the top of the elevator hoistway **are** required for combustible elevator shafts/cabs/suspension. Smoke detector may be required for smoke relief function. NFPA 13 - 8.15.5.6 NFPA 72 -21.3.6

 Control Space

Smoke detector for recall only

Sump pump

- min. 3000 gph or 50 gpm
- Secured, covered, level w/ pit floor
- Separate circuit req. GFCI unless single outlet.

Sump 

Pit

light 

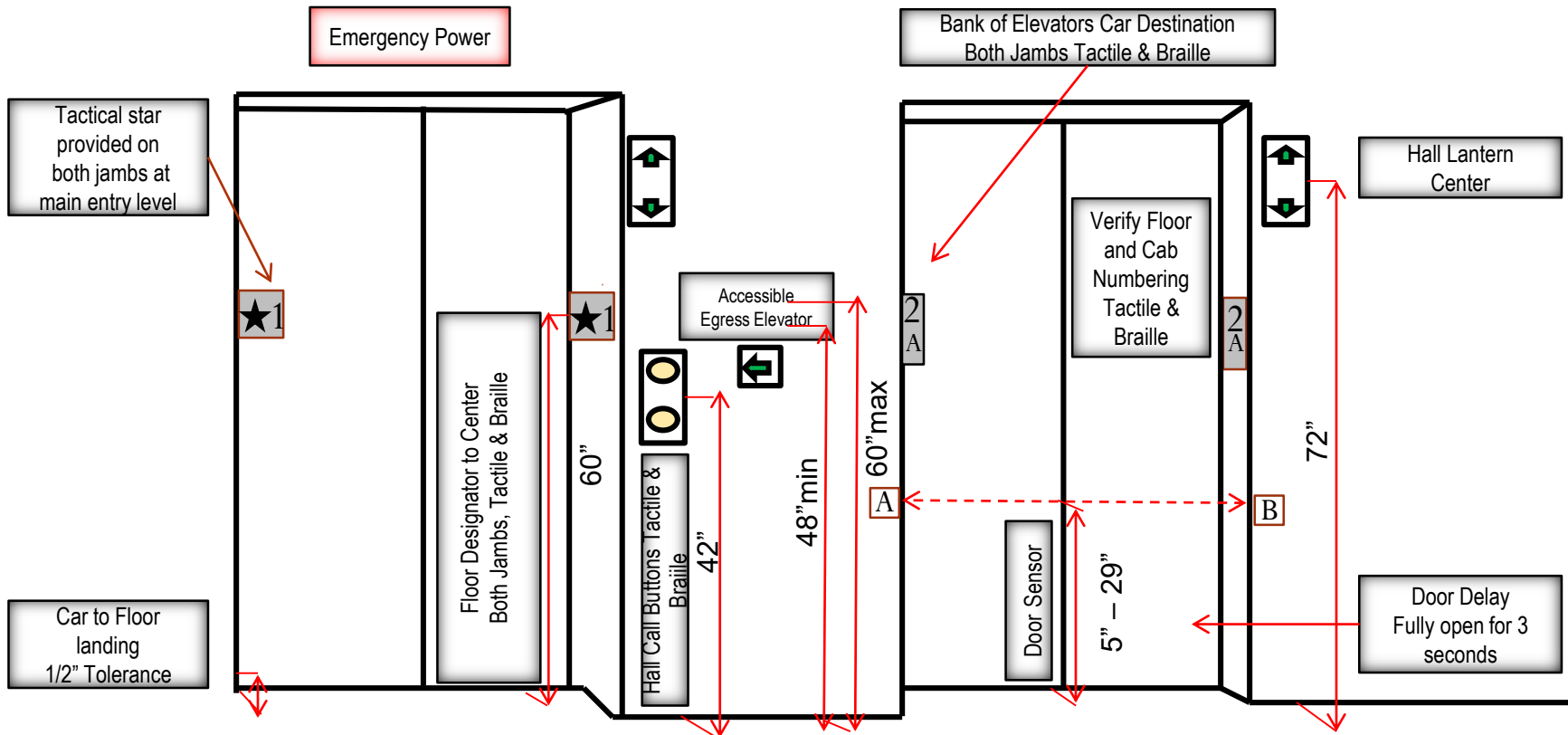




Pit ladder required if pit is greater than 35" in depth. Handrail provided 48" above the landing

ADA 2010 STANDARDS - 4.7

Illuminated "Elevator Emergency Power" sign provided in lobby at the designated level to indicate normal power has failed and emergency power is in affect.



Hall call buttons shall be mounted 42 inches measured from the floor to the centerline between the buttons. Hall lanterns shall be mounted 72 inches minimum measured from the floor to the centerline between the up and down indicators. Raised and Braille characters on hoistway entrances shall be mounted with the centerline at 60 inches above the floor. Sensors for the required door protective and reopening device shall detect an obstruction passing through the door opening at heights of 5 inches and 29 inches, "The automatic door reopening device is activated if an object passes through either line A or line B. Line A and line B represent the vertical locations of the door reopening device not requiring contact