



Building/Elevator Code Coordination

Examples of Sprinkler/Smoke/Heat Detector Location

Effective December 1, 1999
 (Updated 2/18/05, Added cases 4b & c)

Case 1: Building completely sprinklered per NFPA 13.

- combustible hoistway
- electric or hydraulic elevator
- machine room in basement

	Hoistway	Machine Room
2nd Floor	Top of Shaft -Sprinkler -Heat detector/flow switch -Smoke detector	
1st Floor	N/A	
Basement	Bottom of Shaft -sprinkler	-sprinkler -heat detector/flow switch -smoke detector

Case 2: Building completely sprinklered per NFPA 13.

- new passenger elevator
- non-combustible hoistway (roof deck and walls)
- hydraulic unit
- machine room in basement

	Hoistway	Machine Room
2nd Floor	Top of Shaft N/A	
1st Floor	N/A	
Basement	Bottom of Shaft -sprinkler	-sprinkler -heat detector/flow switch -smoke detector

Case 2a: Building completely sprinklered per NFPA 13.

- new freight elevator
- non-combustible hoistway (roof deck and walls)
- hydraulic unit
- machine room in basement

	Hoistway	Machine Room
2nd Floor	Top of Shaft -Sprinkler -Heat detector/flow switch -Smoke detector	
1st Floor	N/A	
Basement	Bottom of Shaft -sprinkler	-sprinkler -heat detector/flow switch -smoke detector

Case 3: Building completely sprinklered per NFPA 13.

- combustible hoistway
- electric traction elevator
- penthouse machine room

	Hoistway	Machine Room
Penthouse		-sprinkler -heat detector/flow switch -smoke detector
2nd Floor	Top of Shaft -sprinkler -heat detector/flow switch -smoke detector	
1st Floor	N/A	
Basement	Bottom of Shaft -sprinkler	

Case 4: Building completely sprinklered per NFPA 13.

- new passenger elevator
- non-combustible hoistway (roof deck and walls)
- electric traction elevator
- penthouse machine room

	Hoistway	Machine Room
Penthouse		-sprinkler -heat detector/flow switch -smoke detector
2nd Floor	N/A	
1st Floor	N/A	
Basement	N/A	

Case 4a: Building completely sprinklered per NFPA 13.

- new freight elevator
- non-combustible hoistway (roof deck and walls)
- electric traction elevator
- penthouse machine room

	Hoistway	Machine Room
Penthouse		-sprinkler -heat detector/flow switch -smoke detector
2nd Floor	Top of Shaft -sprinkler -heat detector/flow switch -smoke detector	
1st Floor	N/A	
Basement	N/A	

Case 4b: Building completely sprinklered per NFPA 13.

- new passenger elevator
- non-combustible hoistway (roof deck and walls)
- machine room less (MRL) elevator
- cabinet style machinery space at top adjacent to hoistway

	Hoistway	Control Closet
2nd Floor	Top of Shaft -sprinkler -heat detector/flow switch -smoke detector	-sprinkler -heat detector/flow switch -smoke detector
1st Floor	N/A	
Basement	N/A	

Case 4c: Building completely sprinklered per NFPA 13.

- new passenger elevator
- non-combustible hoistway (roof deck and walls)
- machine room less (MRL) elevator
- Drive machine in elevator pit

	Hoistway	Control Closet
2nd Floor	Top of Shaft -sprinkler -heat detector/flow switch -smoke detector	
1st Floor	N/A	-sprinkler -heat detector/flow switch -smoke detector
Basement	Bottom of Shaft -sprinkler -Flow Switch	

Case 5: Building sprinklered per NFPA 13R.

- combustible or non-combustible hoistway
- electric or hydraulic elevator
- machine room in basement/ground floor
- apartment building/motel with dwelling units in basement

	Hoistway	Machine Room
2nd Floor	N/A	
1st Floor	N/A	
Basement/ground floor	N/A	-smoke detector if fire-fighter's service provided

Case 6: Building sprinklered per NFPA 13R.

- non-combustible hoistway (roof deck and walls)
- hydraulic elevator
- machine room in basement/ground floor
- apartment building/motel with basement/ground floor parking garage

	Hoistway	Machine Room
2nd Floor	Top of Shaft N/A	
1st Floor	N/A	
Basement/ground floor	Bottom of Shaft -sprinkler	-sprinkler -heat detector/flow switch -smoke detector

Case 7: Building sprinklered per NFPA 13R

- combustible or non-combustible hoistway
- electric traction elevator
- penthouse machine room
- basement/ground floor (w/ fire department access openings)
- apartment building/motel w/living units in lower level

	Hoistway	Machine Room
Penthouse		-smoke detector if fire-fighter's service provided
2nd Floor	Top of Shaft N/A	
1st Floor	N/A	
Basement/ground floor	N/A	

Case 8: Building sprinklered per NFPA 13R with basement/ground floor sprinklered as per NFPA 13 because windowless floor level.

- combustible hoistway
- electric or hydraulic elevator
- machine room in basement/ground floor

	Hoistway	Machine Room
2nd Floor	Top of Shaft -Sprinkler -heat detector/flow switch -smoke detector	
1st Floor	N/A	
Basement/ground floor	Bottom of Shaft -sprinkler	-sprinkler -heat detector/flow switch -smoke detector

Case 9: Building partially sprinklered per NFPA 13R with basement/ground floor sprinklered as per NFPA 13 because windowless floor level.

- new passenger elevator
- non-combustible hoistway (roof deck and walls)
- hydraulic unit
- machine room in basement/ground floor

	Hoistway	Machine Room
2nd Floor	Top of Shaft N/A	
1st Floor	N/A	
Basement/ground floor	Bottom of Shaft -sprinkler	-sprinkler -heat detector/flow switch -smoke detector

Case 9a: Building partially sprinklered per NFPA 13R with basement/ground floor sprinklered as per NFPA 13 because windowless floor level.

- new freight elevator
- non-combustible hoistway (roof deck and walls)
- hydraulic unit
- machine room in basement/ground floor

	Hoistway	Machine Room
2nd Floor	Top of Shaft -sprinkler -heat detector/flow switch -smoke detector	
1st Floor	N/A	
Basement/ground floor	Bottom of Shaft -sprinkler	-sprinkler -heat detector/flow switch -smoke detector

Case 10: Building partially sprinklered per NFPA 13R with basement/ground floor sprinklered as per NFPA 13 because windowless floor level.

- new passenger or freight elevator
- combustible hoistway
- electric traction elevator
- penthouse machine room
- basement/ground floor

	Hoistway	Machine Room
Penthouse		-smoke detector
2nd Floor	Top of Shaft -sprinkler -heat detector/flow switch -smoke detector	
1st Floor	N/A	
Basement/ground floor	Bottom of Shaft -sprinkler	

Case 11: Building sprinklered per NFPA 13R with basement/ground floor sprinklered as per NFPA 13 because windowless floor level.

- new passenger elevator
- non-combustible hoistway (roof deck and walls)
- electric traction elevator
- penthouse machine room
- basement/ground floor

	Hoistway	Machine Room
Penthouse		-smoke detector if fire-fighter's service provided
2nd Floor	Top of Shaft N/A	
1st Floor	N/A	
Basement	N/A	

Case 12: Building partially sprinklered -- basement/ground floor sprinklered as per NFPA 13 because windowless floor level.

- combustible hoistway
- electric or hydraulic elevator
- machine room in basement/ground floor

	<u>Hoistway</u>	<u>Machine Room</u>
2nd Floor	Top of Shaft -sprinkler -heat detector/flow switch -smoke detector	
1st Floor	N/A	
Basement/ground floor	Bottom of Shaft -sprinkler	-sprinkler -heat detector/flow switch -smoke detector

Case 13: Building partially sprinklered-- basement/ground floor sprinklered as per NFPA 13 because windowless floor level.

- combustible hoistway
- electric traction elevator
- penthouse machine room
- basement/ground floor

	Hoistway	Machine Room
Penthouse		-smoke detector if fire-fighter's service provided
2nd Floor	Top of Shaft -sprinkler -heat detector/flow switch -smoke detector	
1st Floor	N/A	
Basement/ground floor	Bottom of Shaft -sprinkler	

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