

Usage of Elevators for Occupant Evacuation Questionnaire

Purpose

This questionnaire is being conducted by the National Institute of Standards and Technology (NIST), an agency of the U.S. Department of Commerce.

The main focus of this research effort is to gain an understanding of how elevators are currently used by occupants of existing multi-story buildings in the United States during fire emergencies. This questionnaire will ask you to provide information on your building's emergency plans and procedures, including how the buildings' evacuation plans incorporate the use of the existing elevator system to evacuate occupants during fire emergencies, specifically individuals with disabilities, if at all.

Completing this questionnaire is voluntary; however, your assistance would be greatly appreciated to help improve the safety of the building occupants.

SECTION 1: Please answer the following questions about the building.

1. Location of building: State: _____
2. What is the occupancy classification of the building? If the building has multiple occupancies, mark all occupancies that apply.
 - Ambulatory Health Care
 - Assembly
 - Business
 - Day Care
 - Detention and Correction
 - Educational
 - Health care
 - Industrial
 - Mercantile
 - Residential (e.g., apartment building, hotel, lodging and rooming house, dormitory)
 - Residential Board and Care
 - Storage
3. Total number of stories above street floor: _____
4. Total number of stories below street floor: _____
5. Location of highest ***occupied*** story in building: _____
6. Location of lowest ***occupied*** story in building: _____
7. How many people work/reside in the building on a normal day: _____ (please provide an approximate number here)

8. Total number of exit stairways located in the building: _____
- a) Total number of exit stairways located above the street floor: _____
- b) Total number of exit stairways located below the street floor: _____
9. Total number of elevators (of all types) located in the building: _____
10. Is the building protected throughout by an automatic fire sprinkler system?
 Yes No Don't know
11. Are automatic fire sprinklers installed in each elevator machine room?
 Yes No Don't know
12. Are elevators used to evacuate some or all building occupants during fire emergencies as part of the building's occupant evacuation plan?
 Yes No Don't know

If the answer to Question 12 is "Yes", please answer the questions in Section 2

SECTION 2: Please answer the following questions about your building's occupant evacuation plan.

13. Elevators are used to evacuate *some or all* occupants during which of the following types of fire evacuation procedures in the building?

Partial evacuation is defined here as a procedure where occupants on the floors most affected by the fire are evacuated by elevators or relocated by elevators to a safer floor in the building.

Full/complete evacuation is defined here as a procedure where all occupants evacuate the building and traverse to a pre-determined location outside of the building.

- Partial evacuation only
- Full/complete evacuation only
- Both partial evacuation and full/complete building evacuation
- Not sure

14. During a fire emergency, elevators can be used by which of the following individuals? Please mark all that apply.

- Any occupant in the building
- Any occupant on the fire floor
- Any occupant in the fire evacuation zone (for example, the fire floor, two floors above, and two floors below)
- Individuals with disabilities or mobility impairments only

15. What types of elevators in your building are used for evacuation during fire emergencies? Please mark all that apply.

- Passenger/public
- Private (restricted access)
- Service (i.e., has pads or hooks installed for pads)
- Freight (doors open vertically)

For each elevator type **used for evacuation** (as indicated above), please select the **number** of evacuation elevators at each capacity (in pounds) in the building:

Elevator capacity	Elevator Type Used for Evacuation			
	Passenger/ Public Elevators	Private Elevators (restricted access)	Service Elevators (Has pads or hooks installed for pads)	Freight Elevators (Door opens vertically)
2000 Pounds or less	<i>Drop down # list in each cell</i>			
2500 Pounds				
3000 Pounds				
3500 Pounds				
4000 Pounds				
4500 Pounds or more				

Capacity of each elevator car indicating the rated load in pounds or kilograms can be found inside the elevator car.

16. How are elevators used for evacuation in your building? Please mark all that apply.
- Evacuation elevators operate in normal operating mode (i.e., the same mode used prior to the fire emergency)
 - Building staff or management (or other building official) operates the elevator during evacuation
 - Occupants are evacuated via elevators by fire fighters once the fire department arrives

Please indicate whether the following procedures or features appear in your building?

17. Elevators are provided with Phase I emergency recall operation?
(One way to determine if Phase I emergency recall is present is by identifying a smoke detector within each elevator lobby)

- Yes No Don't know

18. Elevators are provided with Phase II emergency in-car operation?
(One way to determine if Phase II emergency in-car operation is present is by identifying a 3-position key switch labeled "Fire Operation" located in the operation panel of each elevator car)

- Yes No Don't know

19. Individuals (who are not fire fighters) are assigned to each elevator landing (also known as elevator lobby)?

- Yes No Don't know

20. Individuals (who are not fire fighters) are assigned to assist occupants with disabilities or mobility impairments to evacuate using elevators?

- Yes No Don't know

21. A two-way communication system within each elevator car is provided to communicate to a location staffed by authorized personnel?

- Yes No Don't know

22. A two-way communication system within each elevator landing (or lobby area) is provided to communicate to a location staffed by authorized personnel?

- Yes No Don't know

23. Elevator lobbies (used for evacuation) are enclosed?

- Yes No Don't know

24. There is a graphical sign posted adjacent to each elevator call station on all floors instructing occupants to use the elevators in case of fire?

Yes No Don't know

Respondent Information (optional):

25. Please choose the job position that best describes your role in the building.

*[Drop down menu will include the following list: **emergency manager, building manager, fire marshal, safety personnel, fire protection engineer, other engineer, maintenance personnel, building security, none of the above]***

26. Does your building conduct full building fire evacuation drills at least once per year?

Yes No Don't know

If yes, how do occupants practice fire evacuation drills? Please mark the option that best describes the building's drill procedures.

Evacuation via stairs only

Evacuation via elevators only

Evacuation via both stairs and elevators – occupants' choice during drill

Evacuation via both stairs and elevators – occupants' assigned ahead of the drill

NOTE: This questionnaire contains collection of information requirements subject to the Paperwork Reduction Act (PRA). Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to the requirements of the PRA, unless that collection of information displays a currently valid OMB Control Number. The estimated response time for this questionnaire is 15 minutes. The response time includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this estimate or any other aspects of this collection of information, including suggestions for reducing the length of this questionnaire, to the National Institute of Standards and Technology, Attn., Erica Kuligowski, erica.kuligowski@nist.gov, 301-975-2309.