

Plan Check No: \_\_\_\_\_

## ELEVATORS

1. Elevators provided for passengers shall comply with 11B-407 Elevators. Where multiple elevators are provided, each elevator shall comply with 11B-407 Elevators; (See exceptions). **§11B-206.6**
2. Where elements of existing elevators are altered, the same element shall also be altered in all elevators that are programmed to respond to the same hall call control as the altered elevator and shall comply with the requirements of 11B-407 Elevators for the altered element. **§11B-206.6.1**

**Exception:** Where a group of existing elevators are altered into a destination-oriented elevator system, or where elements of existing destination-oriented elevators are altered, the same elements shall also be altered in all elevators that are programmed to respond to the same call console or group of call consoles and shall comply with the requirements of Section 11B-411 for the altered elements.
3. Elevators shall comply with 11B-407 Elevators and with ASME A17.1. They shall be passenger elevators as classified by ASME A17.1. Elevator operation shall be automatic. When the only elevators provided for use by the public and employees are combination passenger and freight elevators, they shall comply with 11B-407 Elevators and with ASME A17.1. **§11B-407.1, §11B-407.1.1**
4. Where elevator call buttons or keypads are provided, they shall comply with 11B-407.2.1 Call Controls and 11B-309.4 Operation. **§11B-407.2.1**
5. Call buttons and keypads shall be located within one of the reach ranges specified in 11B-308 Reach Ranges, measured to the centerline of the highest operable part. **§11B-407.2.1.1**
6. Call buttons shall have square shoulders, be  $\frac{3}{4}$  inch minimum in the smallest dimension and shall be raised  $\frac{1}{8}$  inch plus or minus  $\frac{1}{32}$  inch above the surrounding surface. The buttons shall be activated by a mechanical motion that is detectable. **§11B-407.2.1.2**
7. A clear floor or ground space complying with 11B-305 Clear Floor or Ground Surface shall be provided at call controls. **§11B-407.2.1.3**
8. Except for destination-oriented elevators, the call button that designates the up direction shall be located above the call button that designates the down direction. **§11B-407.2.1.4**
9. Except at destination-oriented elevators, visible signal fixtures shall be centered at 72 inches minimum above the finish floor or ground. The visible signal elements shall be a minimum  $2\frac{1}{2}$  inches high by  $2\frac{1}{2}$  inches wide. Signals shall be visible from the floor area adjacent to the hall call button. **§11B-407.2.2.2, Figure 11B-407.2.2.2**
10. Floor designations complying with 11B-703.2 Raised Characters and 11B-703.4.1 Height Above Finish Floor or Ground shall be provided on both jambs of elevator hoistway entrances. Floor designations shall be provided in both raised characters and Braille. Raised characters shall be 2 inches high. A raised star, placed to the left of the floor designation, shall be provided on both jambs at the main entry level. The outside diameter of the star shall be 2 inches and all points shall be of equal length. Raised characters, including the star, shall be white on a black background. Braille complying with Section 11B-703.3 Braille shall be placed below the corresponding raised characters and the star. The Braille translation for the star shall be "MAIN". Applied plates are acceptable if they are permanently fixed to the jamb. **§11B-407.2.3.1, Figure 11B-407.2.3.1**
11. Elevator doors shall be the horizontal sliding type. Car gates shall be prohibited. **§11B-407.3.1**
12. Elevator hoistway and car doors shall open and close automatically. **§11B-407.3.2 (See exception)**
13. The width of elevator doors shall comply with Table 11B-407.4.1. **§11B-407.3.6 (See exception)**
14. Inside dimensions of elevator cars and clear width of elevator doors shall comply with Table 11B-407.4.1. **§11B-407.4.1 (see exception)**
15. Floor surfaces in elevator cars shall comply with 11B-302 Floor or Ground Surfaces and 11B-303 Changes in Level. **§11B-407.4.2**

16. The clearance between the car platform sill and the edge of any hoistway landing shall be 1¼ inch maximum. **§11B-407.4.3**
17. Elevator car controls shall be located within one of the reach ranges specified in 11B-308 Reach Ranges. **§11B-407.4.6, See exceptions as applicable.**
18. Car control buttons with floor designations shall comply with the following: **§11B-407.4.6.2**
  - a. Buttons shall have square shoulders, be 3/4 inch minimum in their smallest dimension and be raised 1/8 inch plus or minus 1/32 inch above the surrounding surface. **§11B-407.4.6.2.1**
  - b. Buttons shall be arranged with numbers in ascending order. When two or more columns of buttons are provided they shall read from left to right. **§11B-407.4.6.2.2**
  - c. Car control buttons shall be illuminated. **§11B-407.4.6.2.3**
  - d. Car control buttons shall be activated by a mechanical motion that is detectable. **§11B-407.4.6.2.4**
19. Emergency control buttons shall have their centerlines 35 inches minimum above the finish floor. **§11B-407.4.6.4.1**
20. Emergency controls, including the emergency alarm, shall be grouped at the bottom of the panel. **§11B-407.4.6.4.2**
21. Car control buttons shall comply with the following: **§11B-407.4.7.1**
  - a. Control buttons shall be identified by raised characters or symbols, white on a black background, complying with 11B-703.2 Raised Characters and Braille complying with 11B-703.3 Braille. **§11B-407.4.7.1.1**
  - b. Raised characters or symbols and Braille designations shall be placed immediately to the left of the control button to which the designations apply. **§11B-407.4.7.1.2**
  - c. The control button for the emergency stop, alarm, door open, door close, main entry floor, and phone, shall be identified with raised symbols and Braille as shown in Table 11B-407.4.7.1.3. **§11B-407.4.7.1.3, Table 11B-407.4.7.1.3**
  - d. Buttons with floor designations shall be provided with visible indicators to show that a call has been registered. The visible indication shall extinguish when the car arrives at the designated floor. **§11B-407.4.7.1.4**
  - e. A minimum clear space of 3/8 inch or other suitable means of separation shall be provided between rows of control buttons. **§11B-407.4.7.1.5**
22. Keypads shall be identified by characters complying with 11B-703.5 Visual Characters and shall be centered on the corresponding keypad button. The number five key shall have a single raised dot. The dot shall be 0.118 inch to 0.120 inch base diameter and in other aspects comply with Table 11B-703.3.1. **§11B-407.4.7.2**
23. Audible and visible car position indicators shall be provided in elevator cars. Characters shall be ½ inch high minimum. Indicators shall be located above the car control panel or above the door. **§11B-407.4.8**
24. Emergency two-way communication systems shall comply with 11B-308 Reach Ranges. Raised symbols or characters, white on a black background, and Braille shall be provided adjacent to the device and shall comply with 11B-703.2 Raised Characters and 11B-703.3 Braille. Emergency two-way communication systems between the elevator and a point outside the hoistway shall comply with ASME A17.1. **§11B-407.4.9**
25. Support rails shall be provided on at least one wall of the car and shall comply with the following: **§11B-407.4.10**
  - a. Clearance between support rails and adjacent surfaces shall be 1½ inches minimum. Top of support rails shall be 31 inches minimum to 33 inches maximum above the floor of the car. The ends of the support rail shall be 6 inches maximum from adjacent walls. **§11B-407.4.10.1**
  - b. Support rails shall be smooth and any surface adjacent to them shall be free of sharp or abrasive elements. **§11B-407.4.10.2**
  - c. Allowable stresses shall not be exceeded for materials used when a vertical or horizontal force of 250 pounds is applied at any point on the support rail, fastener, mounting device, or supporting structure. **§11B-407.4.10.3**

### LIMITED-USE/LIMITED-APPLICATION ELEVATORS

26. Limited-use/limited-application elevators shall comply with 11B-408 Limited-Use/Limited-Application Elevators and with ASME A17.1. They shall be passenger elevators as classified by ASME A17.1. Elevator operation shall be automatic. **§11B-408.1**
27. Elevator call buttons and keypads shall comply with 11B-407.2.1 Call Controls. **§11B-408.2.1**
28. Hall signals shall comply with 11B-407.2.2 Hall Signals. **§11B-408.2.2**
29. Signs at elevator hoistways shall comply with 11B-407.2.3.1 Floor Designation. **§11B-408.2.3**
30. Sliding hoistway and car doors shall comply with 11B-407.3.1 through 11B-407.3.3 (Type, Operation, and Reopening Device) and 11B-408.4.1 Car Dimensions and Doors. **§11B-408.3.1**
31. Swinging hoistway doors shall open and close automatically and shall comply with 11B-404 Doors, Doorways, and Gates, 11B-407.3.2 Operation, and 11B-408.3.2 Swinging Doors. **§11B-408.3.2**
32. Swinging doors shall be power-operated and shall comply with ANSI/BHMA A156.19 (1997 or 2002 edition). **§11B-408.3.2.1**
33. Elevator cars shall provide a clear width 42 inches minimum and a clear depth 54 inches minimum. Car doors shall be positioned at the narrow ends of cars and shall provide 32 inches minimum clear width. **§11B-408.4.1, Figure 11B-408.4.1 (See exception)**
34. Floor surfaces in elevator cars shall comply with 11B-302 Floor or Ground Surfaces and 11B-303 Changes in Level. **§11B-408.4.2**
35. The platform to hoistway clearance shall comply with 11B-407.4.3 Platform to Hoistway Clearance. **§11B-408.4.3**
36. Elevator car leveling shall comply with 11B-407.4.4 Leveling. **§11B-408.4.4**
37. Elevator car illumination shall comply with 11B-407.4.5 Illumination. **§11B-408.4.5**
38. Control panels shall be centered on a side wall. **§11B-408.4.6**
39. Designations and indicators of car controls shall comply with 11B-407.4.7 Designations and Indicators of Car Controls. **§11B-408.4.7**
40. Car emergency signaling devices complying with 11B-407.4.9 Emergency Communication shall be provided. **§11B-408.4.8**

### PRIVATE RESIDENCE ELEVATORS

41. Private residence elevators that are provided within a residential dwelling unit required to provide mobility features complying with 11B-809.2 through 11B-809.4 (Accessible Routes, Kitchen, and Toilet Facilities and Bathing Facilities) shall comply with 11B-409 Private Residence Elevators and with ASME A17.1. They shall be passenger elevators as classified by ASME A17.1. Elevator operation shall be automatic. **§11B-409.1**
42. Elevator car and hoistway doors and gates shall be power operated and shall comply with ANSI/BHMA A156.19. Power operated doors and gates shall remain open for 20 seconds minimum when activated. **§11B-409.3.1 (See exception)**
43. Elevator car doors or gates shall be positioned at the narrow end of the clear floor spaces required by 11B-409.4.1 Inside Dimensions of Elevator Cars. **§11B-409.3.2**
44. Elevator cars shall provide a clear floor space of 36 inches minimum by 48 inches minimum and shall comply with 11B-305 Clear Floor or Ground Space. **§11B-409.4.1**
45. The clearance between the car platform and the edge of any landing sill shall be 1½ inch maximum. **§11B-409.4.3**
46. Each car shall automatically stop at a floor landing within a tolerance of ½ inch under rated loading to zero loading conditions. **§11B-409.4.4**
47. Control buttons shall be 3/4 inch minimum in their smallest dimension. **§11B-409.4.6.1**
48. Control panels shall be on a side wall, 12 inches minimum from any adjacent wall. **§11B-409.4.6.2**

## PLATFORM LIFTS

49. Platform lifts shall comply with 11B-410 Platform Lifts. Platform lifts shall be permitted as a component of an accessible route in an existing building or facility or in new construction as follows: **§11B-206.7**
- a. Platform lifts shall be permitted to provide accessible routes to performance areas and speakers' platforms. **§11B-206.7.1**
  - b. Platform lifts shall be permitted to provide an accessible route to comply with the wheelchair space dispersion and line-of-sight requirements of 11B-221 Assembly Areas and 11B-802 Wheelchair Spaces, Companion Seats, Designated Aisle Seats and Semi-Ambulant Seats. **§11B-206.7.2**
  - c. Platform lifts shall be permitted to provide an accessible route to incidental spaces which are not public use spaces and which are occupied by five persons maximum. **§11B-206.7.3**
  - d. Platform lifts shall be permitted to provide an accessible route to: jury boxes and witness stands; raised courtroom stations including, judges' benches, clerks' stations, bailiffs' stations, deputy clerks' stations, and court reporters' stations; and to depressed areas such as the well of a court. **§11B-206.7.4**
  - e. Platform lifts shall be permitted where existing exterior site constraints make use of a ramp or elevator infeasible. **§11B-206.7.5**
  - f. Platform lifts shall be permitted to connect levels within transient lodging guest rooms required to provide mobility features complying with 11B-806.2 Guest Rooms with Mobility Features or residential dwelling units required to provide mobility features complying with 11B-809.2 through 11B-809.4 and adaptable features complying with Chapter 11A, Division IV. **§11B-206.7.6**
  - g. Platform lifts shall be permitted to provide accessible routes to load and unload areas serving amusement rides. **§11B-206.7.7**
  - h. Platform lifts shall be permitted to provide accessible routes to play components or soft contained play structures. **§11B-206.7.8**
  - i. Platform lifts shall be permitted to provide accessible routes to team or player seating areas serving areas of sport activity. **§11B-206.7.9**
50. For recreational boating facilities and fishing piers and platforms, platform lifts shall be permitted to be used instead of gangways that are part of accessible routes serving recreational boating facilities and fishing piers and platforms. **§11B-206.7.10**
51. Platform lifts shall comply with ASME A18.1 (1999 edition or 2003 edition). Platform lifts shall not be attendant-operated and shall provide unassisted entry and exit from the lift. **§11B-410.1**
52. Floor surfaces in platform lifts shall comply with 11B-302 Floor or Ground Surfaces and 11B-303 Changes in Level. **§11B-410.2**
53. Clear floor space in platform lifts shall comply with 11B-305 Clear Floor or Ground Space. **§11B-410.3**
54. The clearance between the platform sill and the edge of any runway landing shall be 1¼ inch maximum. **§11B-410.4**
55. Controls for platform lifts shall comply with 11B-309 Operable Parts. **§11B-410.5**
56. Platform lifts shall have low-energy power-operated doors or gates complying with 11B-404.3 Automatic and Power-Assisted Doors and Gates. Doors shall remain open for 20 seconds minimum. End doors and gates shall provide a clear width 32 inches minimum. Side doors and gates shall provide a clear width 42 inches minimum. **§11B-410.6, Figure 11B-410.6 (See exception)**
57. The minimum size of landings at platform lifts shall be 60 inches by 60 inches. **§11B-410.7**
58. A sign complying with 11B-703.5 Visual Characters shall be posted in a conspicuous place at each landing and within the platform enclosure stating "No Freight" and include the International Symbol of Accessibility complying with 11B-703.7.2.1 International Symbol of Accessibility. **§11B-410.8**
59. Destination-oriented elevators shall comply with Section 11B-411 and with ASME A17.1. They shall be passenger elevators as classified by ASME A17.1. Elevator operation shall be automatic. **§11B-411.1**
- a. In facilities served by destination-oriented elevator systems, floor designations shall be numeric characters only. Floor designations shall be "one" (1) or "zero" (0) at the main entry level and shall increase by one for each successive higher story or level. The initial floor below the main entry level shall be designated "minus one" (-1) and

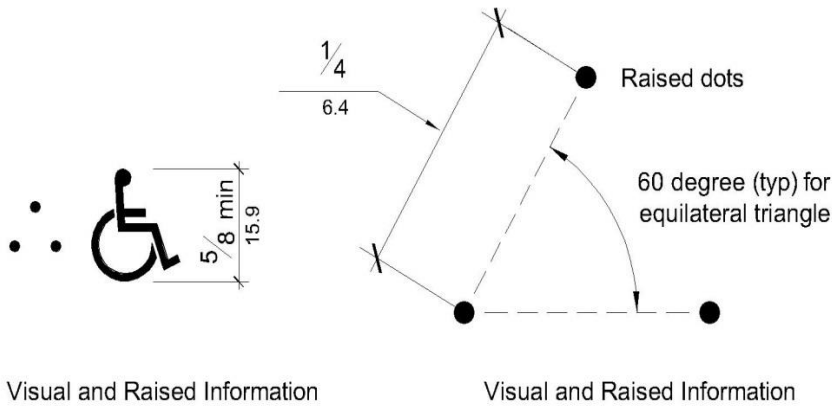
the designation for each successive lower story or level shall decrease by one. Stories or levels shall not be designated by alphabetic characters. **(See exceptions)**

- b. Elevator cars shall be designated with a single alphabetic character. **(See exception)**
60. Elevator landing requirements need to comply with the following: **§11B-411.2.1-§11B-411.2.2**
- a. Hall consoles including: location, keypads, touch screen, accessibility, function button, display screen, audio output, arrangement, additional features, button requirements, identification of floors served, elevator car assignment.
  - b. Elevator car identification at car landings including: visible identification, verbal identification, signs on jambs of elevator hoistway entrances (floor designation signs and car designation signs).
61. Elevator door requirements need to comply with: type, operation, reopening device, height, contact, duration, door delay, width. **§11B-411.3**
62. Elevator car requirements need to comply with: **§11B-411.4**
- a. Car dimensions
  - b. Floor surfaces
  - c. Platform to hoistway clearance
  - d. Leveling
  - e. Illumination
  - f. Elevator car controls
  - g. Designations and indicators of car control buttons
  - h. Car position indicators
  - i. Emergency communication
  - j. Support rail
  - k. Floor destination indicators




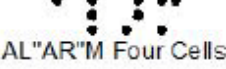





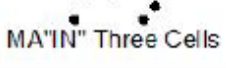

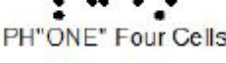
**TABLE 11B-407.4.1  
 ELEVATOR CAR DIMENSIONS**

DOOR LOCATION	MINIMUM DIMENSIONS			
	Door clear width	Inside car, side to side	Inside car, back wall to front return	Inside car, back wall to inside face of door
Centered	42 inches (1067 mm)	80 inches (2032 mm)	51 inches (1295 mm)	54 inches (1372 mm)
Side (off-centered)	36 inches (914 mm) <sup>1</sup>	68 inches (1727 mm)	51 inches (1295 mm)	54 inches (1372 mm)
Any	36 inches (914 mm) <sup>1</sup>	54 inches (1372 mm)	80 inches (2032 mm)	80 inches (2032 mm)
Any	36 inches (914 mm) <sup>2</sup>	60 inches (1524 mm) <sup>2</sup>	60 inches (1524 mm) <sup>2</sup>	60 inches (1524 mm) <sup>2</sup>

1. A tolerance of minus  $\frac{3}{8}$  inch (15.9 mm) is permitted.
2. Other car configurations that provide a turning space complying with Section 11B-304 with the door closed shall be permitted.



**Figure 11B-411.2.1.2.3  
 Destination-Oriented Elevator Accessibility Function Button Indication**

Control Button	Raised Symbol	Braille Message
Emergency Stop		 *ST*OP Three Cells
Alarm		 AL*AR*M Four Cells
Door Open		 OP*EN* Three Cells
Door Close		 CLOSE Five Cells
Main Entry Floor		 MA*IN* Three Cells
Phone		 PH*ONE* Four Cells

**TABLE 11B-407.4.7.1.3  
 ELEVATOR CONTROL BUTTON IDENTIFICATION**

**ADDITIONAL COMMENTS**

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