

Appendix C – Applicable California Building Codes

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11B-201 Application

11B-201.1 Scope. All areas of newly designed and newly constructed buildings and facilities and altered portions of existing buildings and facilities shall comply with these requirements.

Advisory 11B-201.1 Scope. These requirements are to be applied to all areas of a facility unless exempted, or where scoping limits the number of multiple elements required to be accessible. For example, not all medical care patient rooms are required to be accessible; those that are not required to be accessible are not required to comply with these requirements. However, common use and public use spaces such as recovery rooms, examination rooms, and cafeterias are not exempt from these requirements and must be accessible.

11B-206 Accessible routes

11B-206.1 General. Accessible routes shall be provided in accordance with Section 11B-206 and shall comply with Division 4.

11B-206.2 Where required. Accessible routes shall be provided where required by Section 11B-206.2.

11B-206.2.1 Site arrival points. At least one accessible route shall be provided within the site from accessible parking spaces and accessible passenger loading zones; public streets and sidewalks; and public transportation stops to the accessible building or facility entrance they serve. Where more than one route is provided, all routes must be accessible.

Exceptions:

1. Reserved.
2. An accessible route shall not be required between site arrival points and the building or facility entrance if the only means of access between them is a vehicular way not providing pedestrian access.
3. General circulation paths shall be permitted when located in close proximity to an accessible route.

11B-206.2.2 Within a site. At least one accessible route shall connect accessible buildings, accessible facilities, accessible elements, and accessible spaces that are on the same site.

Exception: An accessible route shall not be required between accessible buildings, accessible facilities, accessible elements, and accessible spaces if the only means of access between them is a vehicular way not providing pedestrian access.

11B-206.2.4 Spaces and elements. At least one accessible route shall connect accessible building or facility entrances with all accessible spaces and elements within the building or facility, including mezzanines, which are otherwise connected by a circulation path unless exempted by Section 11B-206.2.3 Exceptions 1 through 7.

11B-206.4 Entrances. Entrances shall be provided in accordance with Section 11B-206.4. Entrance doors, doorways, and gates shall comply with Section 11B-404 and shall be on an accessible route complying with Section 11B-402.

11B-206.4.1 Entrances and exterior ground floor exits. All entrances and exterior ground-floor exits to buildings and facilities shall comply with Section 11B-404.

11B-206.5 Doors, doorways, and gates. Doors, doorways, and gates providing user passage shall be provided in accordance with Section 11B-206.5.

11B-206.5.1 Entrances. Each entrance to a building or facility required to comply with Section 11B-206.4 shall comply with Section 11B-404.

11B-206.5.2 Rooms and spaces. Within a building or facility, every door, doorway or gate serving rooms and spaces complying with this chapter shall comply with Section 11B-404.

11B-206.6 Elevators. Elevators provided for passengers shall comply with Section 11B-407. Where multiple elevators are provided, each elevator shall comply with Section 11B-407.

Exceptions:

1. In a building or facility permitted to use the exceptions to Section 11B-206.2.3 or permitted by Section 11B-206.7 to use a platform lift, elevators complying with Section 11B-408 shall be permitted.
2. Elevators complying with Section 11B-408 or 11B-409 shall be permitted in multi-story residential dwelling units. Elevators provided as a means of access within a private residence shall be installed so that they are not accessible to the general public or to other occupants of the building.

11B-206.6.1 Existing elevators. 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 Section 11B-407 for the altered element.

11B-206.7 Platform lifts. Platform lifts shall comply with Section 11B-410. Platform lifts shall be permitted as a component of an accessible route in new construction in accordance with Section 11B-206.7. Platform lifts shall be permitted as a component of an accessible route in an existing building or facility.

11B-207 Accessible means of egress

11B-207.2 Platform lifts. Standby power shall be provided for platform lifts permitted by Chapter 10, Section 1007.5 to serve as a part of an accessible means of egress. To ensure continued operation in case of primary power loss, platform lifts shall be provided with standby power or with self-rechargeable battery power that provides sufficient power to operate all platform lift functions for a minimum of five upward and downward trips.

11B-208 Parking Spaces

11B-208.2.4 Van Parking Spaces. For every six or fraction of six parking spaces required by 11B-208.2 to comply with 11B-502, at least one shall be a van parking space complying with 11B-502.

11B-208.3.1 General. Parking spaces complying with 11B-502 that serve a particular building or facility shall be located on the shortest accessible route from parking to an entrance complying with 11B-206.4. Where parking serves more than one accessible entrance, parking spaces complying with 11B-502 shall be dispersed and located on the shortest

accessible route to the accessible entrances. In parking facilities that do not serve a particular building or facility, parking spaces complying with 11B-502 shall be located on the shortest accessible route to an accessible pedestrian entrance of the parking facility.

11B-213 Toilet facilities and bathing facilities

11B-213.1 General. Where toilet facilities and bathing facilities are provided, they shall comply with Section 11B-213. Where toilet facilities and bathing facilities are provided in facilities permitted by Section 11B-206.2.3 Exception 1 not to connect stories by an accessible route, toilet facilities and bathing facilities shall be provided on a story connected by an accessible route to an accessible entrance.

11B-213.1.1 Toilet facilities for designated user groups. Where separate toilet facilities are provided for the exclusive use of separate user groups, the toilet facilities serving each user group shall comply with Section 11B-213.

11B-213.2 Toilet rooms and bathing rooms. Where toilet rooms are provided, each toilet room shall comply with Section 11B-603. Where bathing rooms are provided, each bathing room shall comply with Section 11B-603.

11B-213.3 Plumbing fixtures and accessories. Plumbing fixtures and accessories provided in a toilet room or bathing room required to comply with Section 11B-213.2 shall comply with Section 11B-213.3.

11B-213.3.1 Toilet compartments. Where toilet compartments are provided, at least one toilet compartment shall comply with Section 11B-604.8.1. In addition to the compartment required to comply with Section 11B-604.8.1, at least one compartment shall comply with Section 11B-604.8.2 where six or more toilet compartments are provided, or where the combination of urinals and water closets totals six or more fixtures.

11B-213.3.2 Water closets. Where water closets are provided, at least one shall comply with Section 11B-604.

11B-213.3.3 Urinals. Where one or more urinals are provided, at least one shall comply with Section 11B-605.

11B-213.3.4 Lavatories. Where lavatories are provided, at least five percent but no fewer than one shall comply with Section 11B-606 and shall not be located in a toilet compartment.

11B-213.3.5 Mirrors. Where mirrors are provided, at least one shall comply with Section 11B-603.3.

11B-216 Signs

11B-216.1 General. New or altered signs shall be provided in accordance with Section 11B-216 and shall comply with Section 11B-703. The addition of or replacement of signs shall not trigger any additional path of travel requirements.

11B-216.2 Designations. Interior and exterior signs identifying permanent rooms and spaces shall comply with Sections 11B-703.1, 11B-703.2, 11B-703.3 and 11B-703.5. Where pictograms are provided as designations of permanent rooms and spaces, the pictograms shall comply with Section 11B-703.6 and shall have text descriptors complying with Sections 11B-703.2 and 11B-703.5.

11B-216.3 Directional and informational signs. Signs that provide direction to or information about interior and exterior spaces and facilities of the site shall comply with Section 11B-703.5.

11B-216.6 Entrances. In existing buildings and facilities where not all entrances comply with Section 11B-404, entrances complying with Section 11B-404 shall be identified by the International Symbol of Accessibility complying with Section 11B-703.7.2.1. Directional signs complying with Section 11B-703.5 that indicate the location of the nearest entrance complying with Section 11B-404 shall be provided at entrances that do not comply with Section 11B-404. Directional signs complying with Section 11B-703.5, including the International Symbol of Accessibility complying with Section 11B-703.7.2.1, indicating the accessible route to the nearest accessible entrance shall be provided at junctions when the accessible route diverges from the regular circulation path.

11B-216.7 Elevators. Where existing elevators do not comply with Section 11B-407, elevators complying with Section 11B-407 shall be clearly identified with the International Symbol of Accessibility complying with Section 11B-703.7.2.1. Existing buildings that have been remodeled to provide specific elevators for public use that comply with these building

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standards shall have the location of and the directions to these elevators posted in the building lobby on a sign complying with Section 11B-703.5, including the International Symbol of Accessibility complying with Section 11B-703.7.2.1.

11B-216.8 Toilet rooms and bathing rooms. Doorways leading to toilet rooms and bathing rooms complying with Section 11B-603 shall be identified by a geometric symbol complying with Section 11B-703.7.2.6. Where existing toilet rooms or bathing rooms do not comply with Section 11B-603, directional signs indicating the location of the nearest toilet room or bathing room complying with Section 11B-603 within the facility shall be provided. Signs shall comply with Section 11B-703.5 and shall include the International Symbol of Accessibility complying with Section 11B-703.7.2.1. Where existing toilet rooms or bathing rooms do not comply with Section 11B-603, the toilet rooms or bathing rooms complying with Section 11B-603 shall be identified by the International Symbol of Accessibility complying with Section 11B-703.7.2.1. Where clustered single user toilet rooms or bathing facilities are permitted to use exceptions to Section 11B-213.2, toilet rooms or bathing facilities complying with Section 11B-603 shall be identified by the International Symbol of Accessibility complying with Section 11B-703.7.2.1 unless all toilet rooms and bathing facilities comply with Section 11B-603. Existing buildings that have been remodeled to provide specific toilet rooms or bathing rooms for public use that comply with these building standards shall have the location of and the directions to these rooms posted in or near the building lobby or entrance on a sign complying with Section 11B-703.5, including the International Symbol of Accessibility complying with Section 11B-703.7.2.1.

11B-302 Floor or ground surfaces

11B-302.1 General. Floor and ground surfaces shall be stable, firm, and slip resistant and shall comply with Section 11B-302.

11B-302.3 Openings. Openings in floor or ground surfaces shall not allow passage of a sphere more than ½ inch (12.7 mm) diameter except as allowed in Sections 11B-407.4.3, 11B-409.4.3, 11B-410.4, 11B-810.5.3 and 11B-810.10. Elongated openings shall be placed so that the long dimension is perpendicular to the dominant direction of travel.

11B-303 Changes in level

11B-303.1 General. Where changes in level are permitted in floor or ground surfaces, they shall comply with Section 11B-303.

11B-303.2 Vertical. Changes in level of ¼ inch (6.4 mm) high maximum shall be permitted to be vertical and without edge treatment.

11B-303.3 Beveled. Changes in level between ¼ inch (6.4 mm) high minimum and ½ inch (12.7 mm) high maximum shall be beveled with a slope not steeper than 1:2.

11B-304 Turning space

11B-304.1 General. Turning space shall comply with Section 11B-304.

11B-304.2 Floor or ground surfaces. Floor or ground surfaces of a turning space shall comply with Section 11B-302. Changes in level are not permitted.

11B-304.3 Size. Turning space shall comply with Section 11B-304.3.1 or 11B-304.3.2.

11B-304.3.1 Circular space. The turning space shall be a space of 60 inches (1524 mm) diameter minimum. The space shall be permitted to include knee and toe clearance complying with Section 11B-306.

11B-304.3.2 T-Shaped space. The turning space shall be a T-shaped space within a 60 inch (1524 mm) square minimum with arms and base 36 inches (914 mm) wide minimum. Each arm of the T shall be clear of obstructions 12 inches (305 mm) minimum in each direction and the base shall be clear of obstructions 24 inches (610 mm) minimum. The space shall be permitted to include knee and toe clearance complying with Section 11B-306 only at the end of either the base or one arm.

11B-305 Clear floor or ground space

11B-305.1 General. Clear floor or ground space shall comply with Section 11B-305.

11B-305.2 Floor or ground surfaces. Floor or ground surfaces of a clear floor or ground space shall comply with Section 11B-302. Changes in level are not permitted.

11B-305.3 Size. The clear floor or ground space shall be 30 inches (762 mm) minimum by 48 inches (1219 mm) minimum.

11B-305.4 Knee and toe clearance. Unless otherwise specified, clear floor or ground space shall be permitted to include knee and toe clearance complying with Section 11B-306.

11B-305.5 Position. Unless otherwise specified, clear floor or ground space shall be positioned for either forward or parallel approach to an element.

11B-305.6 Approach. One full unobstructed side of the clear floor or ground space shall adjoin an accessible route or adjoin another clear floor or ground space.

11B-306 Knee and toe clearance

11B-306.1 General. Where space beneath an element is included as part of clear floor or ground space or turning space, the space shall comply with Section 11B-306. Additional space shall not be prohibited beneath an element but shall not be considered as part of the clear floor or ground space or turning space.

11B-306.2 Toe clearance.

11B-306.2.1 General. Space under an element between the finish floor or ground and 9 inches (229mm) above the finish floor or ground shall be considered toe clearance and shall comply with Section 11B-306.2.

11B-306.2.2 Maximum depth. Toe clearance shall extend 25 inches (635 mm) maximum under an element.

11B-306.2.3 Minimum required depth. Where toe clearance is required at an element as part of a clear floor space, the toe clearance shall extend 17 inches (432 mm) minimum under the element.

11B-306.2.4 Additional clearance. Space extending greater than 6 inches (152 mm) beyond the available knee clearance at 9 inches (229 mm) above the finish floor or ground shall not be considered toe clearance.

11B-306.2.5 Width. Toe clearance shall be 30 inches (762 mm) wide minimum.

11B-306.3 Knee clearance.

11B-306.3.1 General. Space under an element between 9 inches (229 mm) and 27 inches (686 mm) above the finish floor or ground shall be considered knee clearance and shall comply with Section 11B-306.3.

11B-306.3.2 Maximum depth. Knee clearance shall extend 25 inches (635 mm) maximum under an element at 9 inches (229 mm) above the finish floor or ground.

11B-306.3.3 Minimum required depth. Where knee clearance is required under an element as part of a clear floor space, the knee clearance shall be 11 inches (279 mm) deep minimum at 9 inches (229 mm) above the finish floor or ground, and 8 inches (203 mm) deep minimum at 27 inches (686 mm) above the finish floor or ground.

11B-306.3.5 Width. Knee clearance shall be 30 inches (762 mm) wide minimum.

11B-307 Protruding objects

11B-307.1 General. Protruding objects shall comply with Section 11B-307.

11B-307.2 Protrusion limits. Objects with leading edges more than 27 inches (686 mm) and not more than 80 inches (2032 mm) above the finish floor or ground shall protrude 4 inches (102 mm) maximum horizontally into the circulation path.

Exception: Handrails shall be permitted to protrude 4½ inches (114 mm) maximum.

11B-307.3 Post-Mounted Objects. Free-standing objects mounted on posts or pylons shall overhang circulation paths 12 inches maximum when located 27 inches minimum and 80 inches maximum above the finish floor or ground. Where a sign or other obstruction is mounted between posts or pylons and the clear distance between the posts or pylons is greater than 12 inches, the lowest edge of such sign or obstruction shall be 27 inches maximum or 80 inches minimum above the finish floor or ground.

11B-307.4 Vertical clearance. Vertical clearance shall be 80 inches (2032 mm) high minimum. Guardrails or other barriers shall be provided where the vertical clearance is less than 80 inches (2032 mm) high. The leading edge of such guardrail or barrier shall be located 27 inches (686 mm) maximum above the finish floor or ground. Where a guy support is used parallel to a circulation path, including but not limited to sidewalks, a guy brace, sidewalk guy or similar device shall be used to prevent an overhanging obstruction.

11B-307.5 Required clear width. Protruding objects shall not reduce the clear width required for accessible routes.

11B-308 Reach ranges

11B-308.1 General. Reach ranges shall comply with Section 11B-308.

11B-308.2 Forward reach.

11B-308.2.1 Unobstructed. Where a forward reach is unobstructed, the high forward reach shall be 48 inches (1219 mm) maximum and the low forward reach shall be 15 inches (381 mm) minimum above the finish floor or ground.

11B-308.2.2 Obstructed high reach. Where a high forward reach is over an obstruction, the clear floor space shall extend beneath the element for a distance not less than the required reach depth over the obstruction. The high forward reach shall be 48 inches (1219 mm) maximum where the reach depth is 20 inches (508 mm) maximum. Where the reach depth exceeds 20 inches (508 mm), the high forward reach shall be 44 inches (1118 mm) maximum and the reach depth shall be 25 inches (635 mm) maximum.

11B-308.3 Side reach.

11B-308.3.1 Unobstructed. Where a clear floor or ground space allows a parallel approach to an element and the side reach is unobstructed, the high side reach shall be 48 inches (1219 mm) maximum and the low side reach shall be 15 inches (381 mm) minimum above the finish floor or ground.

11B-308.3.2 Obstructed high reach. Where a clear floor or ground space allows a parallel approach to an element and the high side reach is over an

obstruction, the height of the obstruction shall be 34 inches (864 mm) maximum and the depth of the obstruction shall be 24 inches (610 mm) maximum. The high side reach shall be 48 inches (1219 mm) maximum for a reach depth of 10 inches (254 mm) maximum. Where the reach depth exceeds 10 inches (254 mm), the high side reach shall be 46 inches (1168 mm) maximum for a reach depth of 24 inches (610 mm) maximum.

11B-309 Operable parts

11B-309.1 General. Operable parts shall comply with Section 11B-309.

11B-309.2 Clear floor space. A clear floor or ground space complying with Section 11B-305 shall be provided.

11B-309.3 Height. Operable parts shall be placed within one or more of the reach ranges specified in Section 11B-308.

11B-309.4 Operation. Operable parts shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate operable parts shall be 5 pounds (22.2 N) maximum.

11B-403 Walking surfaces

11B-403.1 General. Walking surfaces that are a part of an accessible route shall comply with Section 11B-403.

11B-403.2 Floor or ground surface. Floor or ground surfaces shall comply with Section 11B-302.

11B-403.3 Slope. The running slope of walking surfaces shall not be steeper than 1:20. The cross slope of walking surfaces shall not be steeper than 1:48.

11B-403.4 Changes in level. Changes in level shall comply with Section 11B-303.

11B-403.5 Clearances. Walking surfaces shall provide clearances complying with Section 11B-403.5.

11B-403.5.1 Clear width. Except as provided in Sections 11B-403.5.2 and 11B-403.5.3, the clear width of walking surfaces shall be 36 inches (914 mm) minimum.

Exceptions:

3. The clear width for sidewalks and walks shall be 48 inches (1219 mm) minimum. When, because of right-of-way restrictions, natural barriers or other existing conditions, the enforcing agency determines that compliance with the 48-inch (1219 mm) clear sidewalk width would create an unreasonable hardship, the clear width may be reduced to 36 inches (914 mm).

11B-403.5.2 Clear width at turn. Where the accessible route makes a 180 degree turn around an element which is less than 48 inches (1219 mm) wide, clear width shall be 42 inches (1067 mm) minimum approaching the turn, 48 inches (1219 mm) minimum at the turn and 42 inches (1067 mm) minimum leaving the turn.

11B-403.5.3 Passing spaces. An accessible route with a clear width less than 60 inches (1524 mm) shall provide passing spaces at intervals of 200 feet (60 960 mm) maximum. Passing spaces shall be either: a space 60 inches (1524 mm) minimum by 60 inches (1524 mm) minimum; or, an intersection of two walking surfaces providing a T-shaped space complying with Section 11B-304.3.2 where the base and arms of the T-shaped space extend 48 inches (1219 mm) minimum beyond the intersection.

11B-403.6 Handrails. Where handrails are provided along walking surfaces with running slopes not steeper than 1:20 they shall comply with Section 11B-505.

11B-404 Doors, doorways, and gates

11B-404.1 General. Doors, doorways, and gates that are part of an accessible route shall comply with Section 11B-404.

11B-404.2 Manual doors, doorways, and manual gates. Manual doors and doorways and manual gates intended for user passage shall comply with Section 11B-404.2.

11B-404.2.1 Revolving doors, gates, and turnstiles. Revolving doors, revolving gates, and turnstiles shall not be part of an accessible route.

11B-404.2.2 Double-leaf doors and gates. At least one of the active leaves of doorways with two leaves shall comply with Sections 11B-404.2.3 and 11B-404.2.4.

11B-404.2.3 Clear width. Door openings shall provide a clear width of 32 inches (813 mm) minimum. Clear openings of doorways with swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees. Openings more than 24 inches (610 mm) deep shall provide a clear opening of 36 inches (914 mm) minimum. There shall be no projections into the required clear opening width lower than 34 inches (864 mm) above the finish floor or ground. Projections into the clear opening width between 34 inches (864 mm) and 80 inches (2032 mm) above the finish floor or ground shall not exceed 4 inches (102 mm).

11B-404.2.4 Maneuvering clearances. Minimum maneuvering clearances at doors and gates shall comply with Section 11B-404.2.4. Maneuvering clearances shall extend the full width of the doorway and the required latch side or hinge side clearance.

11B-404.2.4.1 Swinging Doors and Gates. Swinging doors and gates shall have maneuvering clearances complying with Table 11B-404.2.4.1.

11B-404.2.4.4 Floor or ground surface. Floor or ground surface within required maneuvering clearances shall comply with Section 11B-302. Changes in level are not permitted.

11B-404.2.5 Thresholds. Thresholds, if provided at doorways, shall be ½ inch (12.7 mm) high maximum. Raised thresholds and changes in level at doorways shall comply with Sections 11B-302 and 11B-303.

11B-404.2.7 Door and gate hardware. Handles, pulls, latches, locks, and other operable parts on doors and gates shall comply with Section 11B-309.4. Operable parts of such hardware shall be 34 inches (864 mm) minimum and 44 inches (1118 mm) maximum above the finish floor or ground. Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides.

11B-404.2.9 Door and gate opening force. The force for pushing or pulling open a door or gate other than fire doors shall be as follows:

1. Interior hinged doors and gates: 5 pounds (22.2 N) maximum.
2. Sliding or folding doors: 5 pounds (22.2 N) maximum.

3. Required fire doors: the minimum opening force allowable by the appropriate administrative authority, not to exceed 15 pounds (66.7N).
4. Exterior hinged doors: 5 pounds (22.2 N) maximum.

These forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door or gate in a closed position.

11B-404.2.10 Door and gate surfaces. Swinging door and gate surfaces within 10 inches (254 mm) of the finish floor or ground measured vertically shall have a smooth surface on the push side extending the full width of the door or gate. Parts creating horizontal or vertical joints in these surfaces shall be within 1/16 inch (1.6 mm) of the same plane as the other and be free of sharp or abrasive edges. Cavities created by added kick plates shall be capped.

11B-404.3 Automatic and power-assisted doors and gates. Automatic doors and automatic gates shall comply with Section 11B-404.3. Full-powered automatic doors shall comply with ANSI/BHMA A156.10. Low-energy and power-assisted doors shall comply with ANSI/BHMA A156.19.

11B-404.3.1 Clear width. Doorways shall provide a clear opening of 32 inches (813 mm) minimum in power-on and power-off mode. The minimum clear width for automatic door systems in a doorway shall provide a clear, unobstructed opening of 32 inches (813 mm) with one leaf positioned at an angle of 90 degrees from its closed position.

11B-404.3.5 Controls. Manually operated controls shall comply with Section 11B-309. The clear floor space adjacent to the control shall be located beyond the arc of the door swing.

11B-405 Ramps

11B-405.1 General. Ramps on accessible routes shall comply with Section 11B-405.

11B-405.2 Slope. Ramp runs shall have a running slope not steeper than 1:12.

11B-405.3 Cross slope. Cross slope of ramp runs shall not be steeper than 1:48.

11B-405.4 Floor or ground surfaces. Floor or ground surfaces of ramp runs shall comply with Section 11B-302. Changes in level other than the running slope and cross slope are not permitted on ramp runs.

11B-405.5 Clear width. The clear width of a ramp run shall be 48 inches (1219 mm) minimum.

11B-405.6 Rise. The rise for any ramp run shall be 30 inches (762 mm) maximum.

11B-405.7 Landings. Ramps shall have landings at the top and the bottom of each ramp run. Landings shall comply with Section 11B-405.7.

11B-405.7.1 Slope. Landings shall comply with Section 11B-302. Changes in level are not permitted.

11B-405.7.2 Width. The landing clear width shall be at least as wide as the widest ramp run leading to the landing.

11B-405.7.2.1: Top landings shall be 60 inches (1524 mm) wide minimum.

11B-405.7.3 Length. The landing clear length shall be 60 inches (1524 mm) long minimum.

11B-405.7.3.1: Bottom landings shall extend 72 inches (1829 mm) minimum in the direction of ramp run.

11B-405.7.4 Change in direction. Ramps that change direction between runs at landings shall have a clear landing 60 inches (1525 mm) minimum by 72 inches (1829 mm) minimum in the direction of downward travel from the upper ramp run.

11B-405.7.5 Doorways. Where doorways are located adjacent to a ramp landing, maneuvering clearances required by Sections 11B-404.2.4 and 11B-404.3.2 shall be permitted to overlap the required landing area. Doors, when fully open, shall not reduce the required ramp landing width by more than 3 inches (76 mm). Doors, in any position, shall not reduce the minimum dimension of the ramp landing to less than 42 inches (1067 mm).

11B-405.8 Handrails. Ramp runs shall have handrails complying with Section 11B-505.

11B-405.9 Edge protection. Edge protection complying with Section 11B-405.9.2 shall be provided on each side of ramp runs and at each side of ramp landings.

11B-405.9.2 Curb or barrier. A curb, 2 inches (51 mm) high minimum, or barrier shall be provided that prevents the passage of a 4 inch (102 mm) diameter sphere, where any portion of the sphere is within 4 inches (102 mm) of the finish floor or ground surface. To prevent wheel entrapment, the curb or barrier shall provide a continuous and uninterrupted barrier along the length of the ramp.

11B-405.10 Wet conditions. Landings subject to wet conditions shall be designed to prevent the accumulation of water.

11B-406 Curb ramps, blended transitions and islands

11B-406.1 General. Curb ramps, blended transitions and islands on accessible routes shall comply with Section 11B-406. Curb ramps may be perpendicular, parallel, or a combination of perpendicular and parallel.

11B-406.1.1 Perpendicular curb ramps. Perpendicular curb ramps shall comply with Section 11B-406.2.

11B-406.1.2 Parallel curb ramps. Parallel curb ramps shall comply with Section 11B-406.3.

11B-406.1.3 Blended transitions. Blended transitions shall comply with Section 11B-406.4.

11B-406.1.4 Islands. Islands shall comply with Section 11B-406.6.

11B-406.2 Perpendicular curb ramps. Perpendicular curb ramps shall comply with Sections 11B-406.2 and 11B-406.5.

11B-406.2.1 Slope. Ramp runs shall have a running slope not steeper than 1:12.

11B-406.3 Parallel curb ramps. Parallel curb ramps shall comply with Sections 11B-406.3 and 11B-406.5.

11B-406.3.1 Slope. The running slope of the curb ramp segments shall be in-line with the direction of sidewalk travel. Ramp runs shall have a running slope not steeper than 1:12.

11B-406.3.2 Turning space. A turning space 48 inches (1219 mm) minimum by 48 inches (1219 mm) minimum shall be provided at the bottom of the curb ramp. The slope of the turning space in all directions shall be 1:48 maximum.

11B-406.4 Blended transitions. Blended transitions shall comply with Sections 11B-406.4 and 11B-406.5.

11B-406.4.1 Slope. Blended transitions shall have a running slope not steeper than 1:20.

11B-406.5 Common requirements. Curb ramps and blended transitions shall comply with Section 11B-406.5.

11B-406.5.1 Location. Curb ramps and the flared sides of curb ramps shall be located so that they do not project into vehicular traffic lanes, parking spaces, or parking access aisles. Curb ramps at marked crossings shall be wholly contained within the markings, excluding any flared sides.

11B-406.5.2 Width. The clear width of curb ramp runs (excluding any flared sides), blended transitions, and turning spaces shall be 48 inches (1219 mm) minimum.

11B-406.5.3 Landings. Landings shall be provided at the tops of curb ramps and blended transitions. The landing clear length shall be 48 inches (1219 mm) minimum. The landing clear width shall be at least as wide as the curb ramp, excluding any flared sides, or the blended transition leading to the landing. The slope of the landing in all directions shall be 1:48 maximum.

11B-406.5.4 Floor or ground surfaces. Floor or ground surfaces of curb ramps and blended transitions shall comply with Section 11B-405.4.

11B-406.5.5 Wet conditions. Curb ramps and blended transitions shall comply with Section 11B-405.10.

11B-406.5.7 Cross slope. The cross slope of curb ramps and blended transitions shall be 1:48 maximum.

11B-406.5.8 Counter slope. Counter slopes of adjoining gutters and road surfaces immediately adjacent to and within 24 inches (610 mm) of the curb ramp shall not be steeper than 1:20. The adjacent surfaces at transitions at curb ramps to walks, gutters, and streets shall be at the same level.

11B-406.5.9 Clear space at diagonal curb ramps. The bottom of diagonal curb ramps shall have a clear space 48 inches (1219 mm) minimum outside active traffic lanes of the roadway. Diagonal curb ramps provided at marked crossings shall provide the 48 inches (1219 mm) minimum clear space within the markings.

11B-406.5.10 Diagonal curb ramps. Diagonal or corner type curb ramps with returned curbs or other well-defined edges shall have the edges parallel to the direction of pedestrian flow. Diagonal curb ramps with flared sides shall have a segment of curb 24 inches (610 mm) long minimum located on each side of the curb ramp and within the marked crossing.

11B-406.5.11 Grooved border. Curb ramps shall have a grooved border 12 inches (305 mm) wide along the top of the curb ramp at the level surface of the top landing and at the outside edges of the flared sides. The grooved border shall consist of a series of grooves $\frac{1}{4}$ inch (6.4 mm) wide by $\frac{1}{4}$ inch (6.4 mm) deep, at $\frac{3}{4}$ inch (19 mm) on center.

11B-407 Elevators

11B-407.1 General. Elevators shall comply with Section 11B-407 and with ASME A17.1. They shall be passenger elevators as classified by ASME A17.1. Elevator operation shall be automatic.

11B-407.2 Elevator landing requirements. Elevator landings shall comply with Section 11B-407.2.

11B-407.2.1 Call controls. Where elevator call buttons or keypads are provided, they shall comply with Sections 11B-407.2.1 and 11B-309.4.

11B-407.2.1.1 Height. Call buttons and keypads shall be located within one of the reach ranges specified in Section 11B-308, measured to the centerline of the highest operable part.

11B-407.2.1.2 Size and shape. Call buttons shall have square shoulders, be $\frac{3}{4}$ inch (19.1 mm) minimum in the smallest dimension and shall be raised $\frac{1}{8}$ inch (3.2 mm) plus or minus $\frac{1}{32}$ inch (0.8 mm) above the surrounding surface. The buttons shall be activated by a mechanical motion that is detectable.

11B-407.2.1.3 Clear floor or ground space. A clear floor or ground space complying with Section 11B-305 shall be provided at call controls.

11B-407.2.1.5 Signals. Call buttons shall have visible signals that will activate when each call is registered and will extinguish when each call is answered. Call buttons shall be internally illuminated with a white light over the entire surface of the button.

11B-407.2.2 Hall signals. Hall signals, including in-car signals, shall comply with Section 11B-407.2.2.

11B-407.2.2.1 Visible and audible signals. A visible and audible signal shall be provided at each hoistway entrance to indicate which car is answering a call and the car's direction of travel. Where in-car signals are provided, they shall be visible from the floor area adjacent to the hall call buttons.

11B-407.2.2.2 Visible signals. Visible signal fixtures shall be centered at 72 inches (1829 mm) minimum above the finish floor or ground. The visible signal elements shall be a minimum $2\frac{1}{2}$ inches (64 mm) high by $2\frac{1}{2}$ inches (64 mm) wide. Signals shall be visible from the floor area adjacent to the hall call button.

11B-407.2.2.3 Audible signals. Audible signals shall sound once for the up direction and twice for the down direction, or shall have verbal annunciators that indicate the direction of elevator car travel. Audible signals shall have a frequency of 1500 Hz maximum. Verbal annunciators shall have a frequency of 300 Hz minimum and 3000 Hz maximum. The audible signal and verbal annunciator shall be 10 dB minimum above ambient, but shall not exceed 80 dB, measured at the hall call button.

11B-407.2.3.1 Floor Designation. Floor designations complying with Sections 11B-703.2 and 11B-703.4.1 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 (51 mm) 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 (51 mm) 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 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-407.3.3 Reopening device. Elevator doors shall be provided with a reopening device complying with Section 11B-407.3.3 that shall stop and reopen a car door and hoistway door automatically if the door becomes obstructed by an object or person.

11B-407.3.3.2 Contact. The device shall not require physical contact to be activated, although contact is permitted to occur before the door reverses.

11B-407.3.3.3 Duration. Door reopening devices shall remain effective for 20 seconds minimum.

11B-407.3.5 Door delay. Elevator doors shall remain fully open in response to a car call for 5 seconds minimum.

11B-407.3.6 Width. The width of elevator doors shall comply with Table 11B-407.4.1.

11B-407.4.3 Platform to hoistway clearance. The clearance between the car platform sill and the edge of any hoistway landing shall be 1¼ inch (32 mm) maximum.

11B-407.4.6.1 Location. Controls shall be located within one of the reach ranges specified in Section 11B-308.

11B-407.4.6.2.3 Illumination. Car control buttons shall be illuminated.

11B-407.4.6.4.1 Height. Emergency control buttons shall have their centerlines 35 inches (889 mm) minimum above the finish floor.

11B-407.4.7 Designations and indicators of car controls. Designations and indicators of car controls shall comply with Section 11B-407.4.7.

11B-407.4.7.1.2 Location. Raised characters or symbols and Braille designations shall be placed immediately to the left of the control button to which the designations apply.

11B-407.4.7.1.3 Symbols. 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-407.4.8 Car position indicators. Audible and visible car position indicators shall be provided in elevator cars.

11B-407.4.8.1 Visible indicators. Visible indicators shall comply with Section 11B-407.4.8.1.

11B-407.4.8.1.1 Size. Characters shall be ½ inch (12.7 mm) high minimum.

11B-407.4.8.1.2 Location. Indicators shall be located above the car control panel or above the door.

11B-407.4.8.2 Audible indicators. Audible indicators shall comply with Section 11B-407.4.8.2.

11B-407.4.8.2.1 Signal type. The signal shall be an automatic verbal annunciator which announces the floor at which the car is about to stop.

11B-407.4.9 Emergency Communication. Emergency two-way communication systems shall comply with Section 11B-308.

11B-407.4.10 Support rail. Support rails shall be provided on at least one wall of the car.

11B-407.4.10.1 Location. Clearance between support rails and adjacent surfaces shall be 1½ inches (38 mm) minimum. Top of support rails shall be 31 inches (787 mm) minimum to 33 inches (838 mm) maximum above the floor of the car. The ends of the support rail shall be 6 inches (152 mm) maximum from adjacent walls.

11B-407.4.10.2 Surfaces. Support rails shall be smooth and any surface adjacent to them shall be free of sharp or abrasive elements.

11B-410 Platform lifts

11B-410.1 General. Platform lifts shall comply with ASME A18.1. Platform lifts shall not be attendant operated and shall provide unassisted entry and exit from the lift.

11B-410.5 Operable parts. Controls for platform lifts shall comply with Section 11B-309.

11B-410.7 Landing size. The minimum size of landings at platform lifts shall be 60 inches by 60 inches (1524 mm by 1524 mm).

11B-502 Parking spaces

11B-502.1 General. Car and van parking spaces shall comply with Section 11B-502. Where parking spaces are marked with lines, width measurements of parking spaces and access aisles shall be made from the centerline of the markings.

11B-502.2 Vehicle spaces. Car and van parking spaces shall be 216 inches (5486 mm) long minimum. Car parking spaces shall be 108 inches (2743 mm) wide minimum and van parking spaces shall be 144 inches (3658 mm) wide minimum, shall be marked to define the width, and shall have an adjacent access aisle complying with Section 11B-502.3.

11B-502.3 Access aisle. Access aisles serving parking spaces shall comply with Section 11B-502.3. Access aisles shall adjoin an accessible route. Two parking spaces shall be permitted to share a common access aisle.

11B-502.3.1 Width. Access aisles serving car and van parking spaces shall be 60 inches (1524 mm) wide minimum.

11B-502.3.2 Length. Access aisles shall extend the full required length of the parking spaces they serve.

11B-502.3.3 Marking. Access aisles shall be marked with a blue painted borderline around their perimeter. The area within the blue borderlines shall be marked with hatched lines a maximum of 36 inches (914 mm) on center in a color contrasting with that of the aisle surface, preferably blue or white. The words "NO PARKING" shall be painted on the surface within each access aisle in white letters a minimum of 12 inches (305 mm) in height

and located to be visible from the adjacent vehicular way. Access aisle markings may extend beyond the minimum required length.

11B-502.3.4 Location. Access aisles shall not overlap the vehicular way. Access aisles shall be permitted to be placed on either side of the parking space except for van parking spaces which shall have access aisles located on the passenger side of the parking spaces.

11B-502.4 Floor or ground surfaces. Parking spaces and access aisles serving them shall comply with Section 11B-302. Access aisles shall be at the same level as the parking spaces they serve. Changes in level are not permitted.

11B-502.5 Vertical clearance. Parking spaces, access aisles and vehicular routes serving them shall provide a vertical clearance of 98 inches (2489 mm) minimum.

11B-502.6 Identification. Parking space identification signs shall include the International Symbol of Accessibility complying with Section 11B-703.7.2.1. Signs identifying van parking spaces shall contain additional language or an additional sign with the designation “van accessible.” Signs shall be 60 inches (1524 mm) minimum above the finish floor or ground surface measured to the bottom of the sign.

Exception: Signs located within an accessible route shall be a minimum of 80 inches (2032 mm) above the finish floor or ground surface measured to the bottom of the sign.

11B-502.6.3 Location. A parking space identification sign shall be visible from each parking space. Signs shall be permanently posted either immediately adjacent to the parking space or within the projected parking space width at the head end of the parking space. Signs may also be permanently posted on a wall at the interior end of the parking space.

11B-502.7.1 Arrangement. Parking spaces and access aisles shall be designed so that persons using them are not required to travel behind parking spaces other than to pass behind the parking space in which they parked.

11B-503 Passenger drop-off and loading zones

11B-503.2 Vehicle pull-up space. Passenger drop-off and loading zones shall provide a vehicular pull-up space 96 inches (2438 mm) wide minimum and 20 feet (6096 mm) long minimum.

11B-503.3 Access aisle. Passenger drop-off and loading zones shall provide access aisles complying with Section 11B-503 adjacent and parallel to the vehicle pull-up space. Access aisles shall adjoin an accessible route and shall not overlap the vehicular way.

11B-503.3.1 Width. Access aisles serving vehicle pull-up spaces shall be 60 inches (1524 mm) wide minimum.

11B-503.3.2 Length. Access aisles shall extend the full length of the vehicle pull-up spaces they serve.

11B-503.3.3 Marking. Access aisles shall be marked with a painted borderline around their perimeter. The area within the borderlines shall be marked with hatched lines a maximum of 36 inches (914 mm) on center in a color contrasting with that of the aisle surface.

11B-503.4 Floor and ground surfaces. Vehicle pull-up spaces and access aisles serving them shall comply with Section 11B-302. Access aisles shall be at the same level as the vehicle pull-up space they serve. Changes in level are not permitted.

11B-505 Handrails

11B-505.1 General. Handrails provided along walking surfaces complying with Section 11B-403, required at ramps complying with Section 11B-405, and required at stairs complying with Section 11B-504 shall comply with Section 11B-505.

11B-505.2 Where required. Handrails shall be provided on both sides of stairs and ramps.

Exceptions:

1. In assembly areas, handrails shall not be required on both sides of aisle ramps where a handrail is provided at either side or within the aisle width.
2. Curb ramps do not require handrails.

3. At door landings, handrails are not required when the ramp run is less than 6 inches (152 mm) in rise or 72 inches (1829 mm) in length.

11B-505.3 Continuity. Handrails shall be continuous within the full length of each stair flight or ramp run. Inside handrails on switchback or dogleg stairs and ramps shall be continuous between flights or runs.

11B-505.4 Height. Top of gripping surfaces of handrails shall be 34 inches (864 mm) minimum and 38 inches (965 mm) maximum vertically above walking surfaces, stair nosings, and ramp surfaces. Handrails shall be at a consistent height above walking surfaces, stair nosings, and ramp surfaces.

11B-505.5 Clearance. Clearance between handrail gripping surfaces and adjacent surfaces shall be 1½ inches (38 mm) minimum. Handrails may be located in a recess if the recess is 3 inches (76 mm) maximum deep and 18 inches (457 mm) minimum clear above the top of the handrail.

11B-505.7 Cross section. Handrail gripping surfaces shall have a cross section complying with Section 11B-505.7.1 or 11B-505.7.2.

11B-505.7.1 Circular cross section. Handrail gripping surfaces with a circular cross section shall have an outside diameter of 1¼ inches (32 mm) minimum and 2 inches (51 mm) maximum.

11B-505.7.2 Non-circular cross sections. Handrail gripping surfaces with a non-circular cross section shall have a perimeter dimension of 4 inches (102 mm) minimum and 6¼ inches (159 mm) maximum, and a cross-section dimension of 2 ¼ inches (57 mm) maximum.

11B-505.8 Surfaces. Handrail gripping surfaces and any surfaces adjacent to them shall be free of sharp or abrasive elements and shall have rounded edges.

11B-505.9 Fittings. Handrails shall not rotate within their fittings.

11B-505.10 Handrail extensions. Handrail gripping surfaces shall extend beyond and in the same direction of stair flights and ramp runs in accordance with Section 11B-505.10.

11B-603 Toilet and Bathing Rooms

11B-603.2 Clearances.

Clearances shall comply with Section 11B-603.2.

11B-603.2.1 Turning space. Turning space complying with Section 11B-304 shall be provided within the room.

11B-603.2.2 Overlap. Required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap.

11B-603.2.3 Door swing. Doors shall not swing into the clear floor space or clearance required for any fixture. Other than the door to the accessible water closet compartment, a door, in any position, may encroach into the turning space by 12 inches (305 mm) maximum.

11B-603.3 Mirrors. Mirrors located above lavatories or countertops shall be installed with the bottom edge of the reflecting surface 40 inches (1016 mm) maximum above the finish floor or ground. Mirrors not located above lavatories or countertops shall be installed with the bottom edge of the reflecting surface 35 inches (889 mm) maximum above the finish floor or ground.

11B-603.4 Coat hooks, shelves and medicine cabinets. Coat hooks shall be located within one of the reach ranges specified in Section 11B-308. Shelves shall be located 40 inches (1016 mm) minimum and 48 inches (1219 mm) maximum above the finish floor. Medicine cabinets shall be located with a usable shelf no higher than 44 inches (1118 mm) maximum above the finish floor.

11B-603.5 Accessories. Where towel or sanitary napkin dispensers, waste receptacles, or other accessories are provided in toilet facilities, at least one of each type shall be located on an accessible route. All operable parts, including coin slots, shall be 40 inches (1016 mm) maximum above the finish floor.

11B-604 Water closets and toilet compartments

11B-604.1 General. Water closets and toilet compartments shall comply with Sections 11B-604.2 through 11B-604.8.

Exception: Water closets and toilet compartments for children's use shall be permitted to comply with Section 11B-604.9.

11B-604.2 Location. The water closet shall be positioned with a wall or partition to the rear and to one side. The centerline of the water closet shall be 17 inches (432 mm) minimum to 18 inches (457 mm) maximum from the side wall or partition, except that the water closet shall be 17 inches (432 mm) minimum and 19 inches (483 mm) maximum from the side wall or partition in the ambulatory accessible toilet compartment specified in Section 11B-604.8.2. Water closets shall be arranged for a left-hand or right-hand approach.

11B-604.3.1 Size. Clearance around a water closet shall be 60 inches (1524 mm) minimum measured perpendicular from the side wall and 56 inches (1422 mm) minimum measured perpendicular from the rear wall. A minimum 60 inches (1524 mm) wide and 48 inches (1219 mm) deep maneuvering space shall be provided in front of the water closet.

11B-604.3.2 Overlap. The required clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, dispensers, sanitary napkin disposal units, coat hooks, shelves, accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearance.

11B-604.4 Seats. The seat height of a water closet above the finish floor shall be 17 inches (432 mm) minimum and 19 inches (483 mm) maximum measured to the top of the seat. Seats shall not be sprung to return to a lifted position. Seats shall be 2 inches (51 mm) high maximum.

11B-604.5 Grab bars. Grab bars for water closets shall comply with Section 11B-609. Grab bars shall be provided on the side wall closest to the water closet and on the rear wall. Where separate grab bars are required on adjacent walls at a common mounting height, an L-shaped grab bar meeting the dimensional requirements of Sections 11B-604.5.1 and 11B-604.5.2 shall be permitted.

11B-604.5.1 Side wall. The side wall grab bar shall be 42 inches (1067 mm) long minimum, located 12 inches (305 mm) maximum from the rear wall and extending 54 inches (1372 mm) minimum from the rear wall with the front end positioned 24 inches (610 mm) minimum in front of the water closet.

11B-604.5.2 Rear wall. The rear wall grab bar shall be 36 inches (914 mm) long minimum and extend from the centerline of the water closet 12 inches (305 mm) minimum on one side and 24 inches (610 mm) minimum on the other side.

11B-604.6 Flush controls. Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with Section 11B-309 except they shall be located 44 inches (1118 mm) maximum above the floor. Flush controls shall be located on the open side of the water closet except in ambulatory accessible compartments complying with Section 11B-604.8.2.

11B-604.7 Dispensers. Toilet paper dispensers shall comply with Section 11B-309.4 and shall be 7 inches (178 mm) minimum and 9 inches (229 mm) maximum in front of the water closet measured to the centerline of the dispenser. The outlet of the dispenser shall be below the grab bar, 19 inches (483 mm) minimum above the finish floor and shall not be located behind grab bars. Dispensers shall not be of a type that controls delivery or that does not allow continuous paper flow.

11B-604.8 Toilet compartments. Wheelchair accessible toilet compartments shall meet the requirements of Sections 11B-604.8.1 and 11B-604.8.3. Compartments containing more than one plumbing fixture shall comply with Section 11B-603. Ambulatory accessible compartments shall comply with Sections 11B-604.8.2 and 11B-604.8.3.

11B-604.8.1 Wheelchair accessible compartments. Wheelchair accessible compartments shall comply with Section 11B-604.8.1.

11B-604.8.1.1 Size. Wheelchair accessible compartments shall be 60 inches (1524 mm) wide minimum measured perpendicular to the side wall, and 56 inches (1422 mm) deep minimum for wall hung water closets and 59 inches (1499 mm) deep minimum for floor mounted water closets measured perpendicular to the rear wall. Wheelchair accessible compartments for children's use shall be 60 inches (1524 mm) wide minimum measured perpendicular to the side wall, and 59 inches (1499 mm) deep minimum for wall hung and floor mounted water closets measured perpendicular to the rear wall.

11B-604.8.1.1.1 Maneuvering space with in-swinging door. In a wheelchair accessible compartment with an in-swinging door, a minimum

60 inches (1524 mm) wide by 36 inches (914 mm) deep maneuvering space shall be provided in front of the clearance required in Section 11B-604.8.1.1. See Figures 11B-604.8.1.1.2 (b) and 11B-604.8.1.1.3 (b).

11B-604.8.1.1.2 Maneuvering space with side-opening door. In a wheelchair accessible compartment with a side-opening door, either in-swinging or out-swinging, a minimum 60 inches (1524 mm) wide and 60 inches (1524 mm) deep maneuvering space shall be provided in front of the water closet. See Figure 11B-604.8.1.1.2.

11B-604.8.1.1.3 Maneuvering space with end-opening door. In a wheelchair accessible compartment with an end-opening door (facing the water closet), either in-swinging or outswinging, a minimum 60 inches (1524 mm) wide and 48 inches (1219 mm) deep maneuvering space shall be provided in front of the water closet. See Figure 11B-604.8.1.1.3.

11B-604.8.1.2 Doors. Toilet compartment doors, including door hardware, shall comply with Section 11B-404 except that if the approach is from the push side of the compartment door, clearance between the door side of the compartment and any obstruction shall be 48 inches (1219 mm) minimum measured perpendicular to the compartment door in its closed position. Doors shall be located in the front partition or in the side wall or partition farthest from the water closet. Where located in the front partition, the door opening shall be 4 inches (102 mm) maximum from the side wall or partition farthest from the water closet. Where located in the side wall or partition, the door opening shall be 4 inches (102 mm) maximum from the front partition. The door shall be self-closing. A door pull complying with Section 11B-404.2.7 shall be placed on both sides of the door near the latch. Doors shall not swing into the clear floor space or clearance required for any fixture. Doors may swing into that portion of maneuvering space which does not overlap the clearance required at a water closet.

Exception: When located at the side of a toilet compartment, the toilet compartment door opening shall provide a clear width of 34 inches (864 mm) minimum.

11B-604.8.1.3 Approach. Compartments shall be arranged for left-hand or right-hand approach to the water closet.

11B-604.8.1.4 Toe clearance. At least one side partition shall provide a toe clearance of 9 inches (229 mm) minimum above the finish floor and 6 inches (152 mm) deep minimum beyond the compartment-side face of the

partition, exclusive of partition support members. Partition components at toe clearances shall be smooth without sharp edges or abrasive surfaces. Compartments for children's use shall provide a toe clearance of 12 inches (305 mm) minimum above the finish floor.

Exception: Toe clearance at the side partition is not required in a compartment greater than 66 inches (1676 mm) wide.

11B-604.8.1.5 Grab bars. Grab bars shall comply with Section 11B-609. A side-wall grab bar complying with Section 11B-604.5.1 shall be provided and shall be located on the wall closest to the water closet. In addition, a rear-wall grab bar complying with Section 11B-604.5.2 shall be provided. Where separate grab bars are required on adjacent walls at a common mounting height, an L-shaped grab bar meeting the dimensional requirements of Sections 11B-604.5.1 and 11B-604.5.2 shall be permitted.

11B-604.8.2.2 Doors. Toilet compartment doors, including door hardware, shall comply with 11B-404, except that if the approach is to the latch side of the compartment door, clearance between the door side of the compartment and any obstruction shall be 44 inches minimum. The door shall be self-closing. A door pull complying with 11B-404.2 shall be placed on both sides of the door near the latch. Toilet compartment doors shall not swing into the minimum required compartment area.

11B-606 Lavatories and sinks

11B-606.1 General. Lavatories and sinks shall comply with Section 11B-606.

11B-606.2 Clear floor space. A clear floor space complying with Section 11B-305, positioned for a forward approach, and knee and toe clearance complying with Section 11B-306 shall be provided.

11B-606.3 Height. Lavatories and sinks shall be installed with the front of the higher of the rim or counter surface 34 inches (864 mm) maximum above the finish floor or ground.

11B-606.4 Faucets. Controls for faucets shall comply with Section 11B-309. Hand-operated metering faucets shall remain open for 10 seconds minimum.

11B-606.5 Exposed pipes and surfaces. Water supply and drain pipes under lavatories and sinks shall be insulated or otherwise configured to protect against contact. There shall be no sharp or abrasive surfaces under lavatories and sinks.

11B-606.6 Adjacent side wall or partition. Lavatories, when located adjacent to a side wall or partition, shall be a minimum of 18 inches (457 mm) to the centerline of the fixture.

11B-609 Grab bars

11B-609.2 Cross section. Grab bars shall have a cross section complying with Section 11B-609.2.1 or 11B-609.2.2.

11B-609.2.1 Circular cross section. Grab bars with circular cross sections shall have an outside diameter of 1¼ inches (32 mm) minimum and 2 inches (51 mm) maximum.

11B-609.2.2 Non-circular cross section. Grab bars with non-circular cross sections shall have a cross-section dimension of 2 inches (51 mm) maximum and a perimeter dimension of 4 inches (102 mm) minimum and 4.8 inches (122 mm) maximum.

11B-609.3 Spacing. The space between the wall and the grab bar shall be 1½ inches (38 mm). The space between the grab bar and projecting objects below and at the ends shall be 1½ inches (38 mm) minimum. The space between the grab bar and projecting objects above shall be 12 inches (305 mm) minimum.

11B-609.4 Position of grab bars. Grab bars shall be installed in a horizontal position, 33 inches (838 mm) minimum and 36 inches (914 mm) maximum above the finish floor measured to the top of the gripping surface, except that at water closets for children's use complying with Section 11B-604.9, grab bars shall be installed in a horizontal position 18 inches (457 mm) minimum and 27 inches (686 mm) maximum above the finish floor measured to the top of the gripping surface. The height of the lower grab bar on the back wall of a bathtub shall comply with Section 11B-607.4.1.1 or 11B-607.4.2.1.

11B-609.5 Surface hazards. Grab bars and any wall or other surfaces adjacent to grab bars shall be free of sharp or abrasive elements and shall have rounded edges.

11B-703 Signs

11B-703.1 General. Signs shall comply with Section 11B-703. Where both visual and tactile characters are required, either one sign with both visual and tactile characters, or two separate signs, one with visual, and one with tactile characters, shall be provided.

11B-703.2 Raised characters. Raised characters shall comply with Section 11B-703.2 and shall be duplicated in Braille complying with Section 11B-703.3. Raised characters shall be installed in accordance with Section 11B-703.4.

11B-703.3 Braille. Braille shall be contracted (Grade 2) and shall comply with Sections 11B-703.3 and 11B-703.4.

11B-703.3.2 Position. Braille shall be positioned below the corresponding text in a horizontal format, flush left or centered. If text is multi-lined, Braille shall be placed below the entire text. Braille shall be separated 3/8 inch (9.5 mm) minimum and 1/2 inch (12.7 mm) maximum from any other tactile characters and 3/8 inch (9.5 mm) minimum from raised borders and decorative elements.

Exception: Braille provided on elevator car controls shall be separated 3/16 inch (4.8 mm) minimum and shall be located directly below the corresponding raised characters or symbols.

11B-703.4 Installation height and location. Signs with tactile characters shall comply with Section 11B-703.4.

11B-703.4.1 Height above finish floor or ground. Tactile characters on signs shall be located 48 inches (1219 mm) minimum above the finish floor or ground surface, measured from the baseline of the lowest Braille cells and 60 inches (1524 mm) maximum above the finish floor or ground surface, measured from the baseline of the highest line of raised characters.

Exception: Tactile characters for elevator car controls shall not be required to comply with Section 11B-703.4.1.

11B-703.4.2 Location. Where a tactile sign is provided at a door, the sign shall be located alongside the door at the latch side. Where a tactile sign is provided at double doors with one active leaf, the sign shall be located on

the inactive leaf. Where a tactile sign is provided at double doors with two active leaves, the sign shall be located to the right of the right hand door. Where there is no wall space at the latch side of a single door or at the right side of double doors, signs shall be located on the nearest adjacent wall. Signs containing tactile characters shall be located so that a clear floor space of 18 inches (457 mm) minimum by 18 inches (457 mm) minimum, centered on the tactile characters, is provided beyond the arc of any door swing between the closed position and 45 degree open position. Where permanent identification signage is provided for rooms and spaces they shall be located on the approach side of the door as one enters the room or space. Signs that identify exits shall be located on the approach side of the door as one exits the room or space.

11B-703.5 Visual characters. Visual characters shall comply with Section 11B-703.5.

Exception: Where visual characters comply with Section 11B-703.2 and are accompanied by Braille complying with Section 11B-703.3, they shall not be required to comply with Sections 11B-703.5.2 through 11B-703.5.6, 11B-703.5.8 and 11B-703.5.9.

11B-703.5.1 Finish and contrast. Characters and their background shall have a non-glare finish. Characters shall contrast with their background with either light characters on a dark background or dark characters on a light background.

11B-703.5.6 Height from finish floor or ground. Visual characters shall be 40 inches (1016 mm) minimum above the finish floor or ground.

Exceptions:

1. Visual characters indicating elevator car controls shall not be required to comply with Section 11B-703.5.6.
2. Floor-level exit signs complying with Chapter 10, Section 1011.7 shall not be required to comply with Section 11B-703.5.6.
3. Where provided, floor plans providing emergency procedures information in accordance with Title 19 shall not be required to comply with Section 11B-703.5.6.

11B-703.6 Pictograms. Pictograms shall comply with Section 11B-703.6.

11B-703.6.1 Pictogram field. Pictograms shall have a field height of 6 inches (152 mm) minimum. Characters and Braille shall not be located in the pictogram field.

11B-703.6.2 Finish and contrast. Pictograms and their field shall have a non-glare finish. Pictograms shall contrast with their field with either a light pictogram on a dark field or a dark pictogram on a light field.

11B-703.6.3 Text descriptors. Pictograms shall have text descriptors located directly below the pictogram field. Text descriptors shall comply with Sections 11B-703.2, 11B-703.3 and 11B-703.4.

11B-703.7 Symbols of accessibility. Symbols of accessibility shall comply with Section 11B-703.7.

11B-703.7.1 Finish and contrast. Symbols of accessibility and their background shall have a non-glare finish. Symbols of accessibility shall contrast with their background with either a light symbol on a dark background or a dark symbol on a light background.

11B-703.7.2 Symbols.

11B-703.7.2.1 International Symbol of Accessibility. The International Symbol of Accessibility shall comply with Figure 11B-703.7.2.1. The symbol shall consist of a white figure on a blue background. The blue shall be Color No. 15090 in Federal Standard 595B.

Exception: The appropriate enforcement agency may approve other colors to complement décor or unique design. The symbol contrast shall be light on dark or dark on light.

11B-703.7.2.6 Toilet and bathing facilities geometric symbols.

Doorways leading to toilet rooms and bathing rooms shall be identified by a geometric symbol complying with Section 11B-703.7.2.6. The symbol shall be mounted at 58 inches (1473 mm) minimum and 60 inches (1524 mm) maximum above the finish floor or ground surface measured from the centerline of the symbol. Where a door is provided the symbol shall be mounted within 1 inch (25 mm) of the vertical centerline of the door.

11B-703.7.2.6.1 Men's toilet and bathing facilities. Men's toilet and bathing facilities shall be identified by an equilateral triangle, ¼ inch (6.4 mm) thick with edges 12 inches (305 mm) long and a vertex pointing

upward. The triangle symbol shall contrast with the door, either light on a dark background or dark on a light background.

11B-703.7.2.6.2 Women's toilet and bathing facilities. Women's toilet and bathing facilities shall be identified by a circle, $\frac{1}{4}$ inch (6.4 mm) thick and 12 inches (305 mm) in diameter. The circle symbol shall contrast with the door, either light on a dark background or dark on a light background.

11B-703.7.2.6.3 Unisex toilet and bathing facilities. Unisex toilet and bathing facilities shall be identified by a circle, $\frac{1}{4}$ inch (6.4 mm) thick and 12 inches (305 mm) in diameter with a $\frac{1}{4}$ inch (6.4 mm) thick triangle with a vertex pointing upward superimposed on the circle and within the 12-inch (305 mm) diameter. The triangle symbol shall contrast with the circle symbol, either light on a dark background or dark on a light background. The circle symbol shall contrast with the door, either light on a dark background or dark on a light background.

11B-703.7.2.6.4 Edges and corners. Edges of signs shall be rounded, chamfered or eased. Corners of signs shall have a minimum radius of $\frac{1}{8}$ inch (3.2 mm).

11B-708 Two-way communication systems

11B-708.1 General. Two-way communication systems shall comply with Section 11B-708.

11B-708.2 Audible and visual indicators. The system shall provide both audible and visual signals.

11B-708.3 Handsets. Handset cords, if provided, shall be 29 inches (737 mm) long minimum.

11B-902 Dining surfaces and work surfaces

11B-902.1 General. Dining surfaces and work surfaces shall comply with Sections 11B-902.2 and 11B-902.3.

11B-902.2 Clear floor or ground space. A clear floor space complying with Section 11B-305 positioned for a forward approach shall be provided. Knee and toe clearance complying with Section 11B-306 shall be provided.

11B-902.3 Height. The tops of dining surfaces and work surfaces shall be 28 inches (711 mm) minimum and 34 inches (864 mm) maximum above the finish floor or ground.