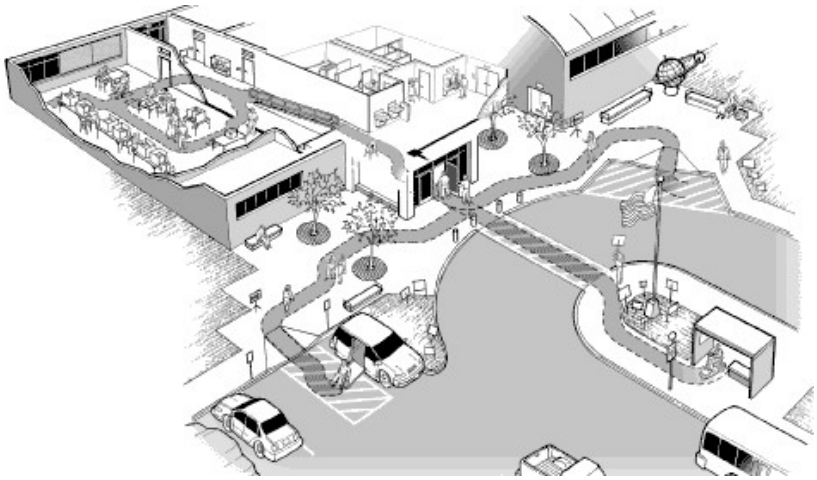
Training Manual

HOW TO SURVEY POLLING PLACES FOR ACCESSIBILITY



A collaborative effort of the:
Secretary of State and California County Elections Officials

Presented by

BlueDAG

July 2024

HOW TO SURVEY POLLING PLACES FOR ACCESSIBILITY

This training manual is designed to accompany the training class and is not to be used without the benefit of instruction from a qualified trainer.

Disclaimer

The information or materials provided in this training manual are intended solely as informational guidance and are not a determination of your agency's legal rights or responsibilities under the Americans with Disabilities Act (ADA), California Regulations, Voting Accessibility for the Elderly and Handicapped Act of 1984, Help America Vote Act of 2002, and California Elections Code, section 12280.

These materials are not intended to provide legal advice. Questions regarding the application of State or Federal laws to specific cases or matters should be addressed to an organizational attorney.

Alternate Formats

In accordance with ADA requirements, this publication can be made available in Braille, large print, and computer disk as a reasonable accommodation for an individual with a disability. To request a copy of alternate formats, please contact BlueDAG, LLC (916) 473-9444 (TTY: 711)

FACT SHEET

BlueDAG, LLC

BlueDAG LLC was commissioned by the California Secretary of State (SOS) to conduct a comprehensive review and revision of guidelines pertaining to the surveying of polling locations statewide in accordance with the Americans with Disabilities Act (ADA), the Department of Justice's ADA standards for accessible design of 2010, the Help America Vote Act of 2002, California Code of Regulations Title 24, Chapter 11B for accessible public buildings and related facilities, and any relevant court decisions. BlueDAG LLC, founded in 2016, was established to proliferate knowledge of accessibility laws and guidelines through training, software management and guidance, and outreach. Our committed team possesses a collective experience of more than 40 years in the fields of training, on-site inspections, and consultancy, particularly in the domains of physical access and program assessments. Our services cater to government agencies and entities of various sizes, both in the public and private sectors.

We provide comprehensive consulting services and technical assistance in the following areas:

- Disability Awareness
- Reasonable Accommodation and Employment Issues
- Accessibility to Programs and Services
- Physical Access Surveys
- Publications
- Referral and Resources

For additional information on the services BlueDAG, LCC provides, please contact:

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Polling Place Accessibility Guidelines

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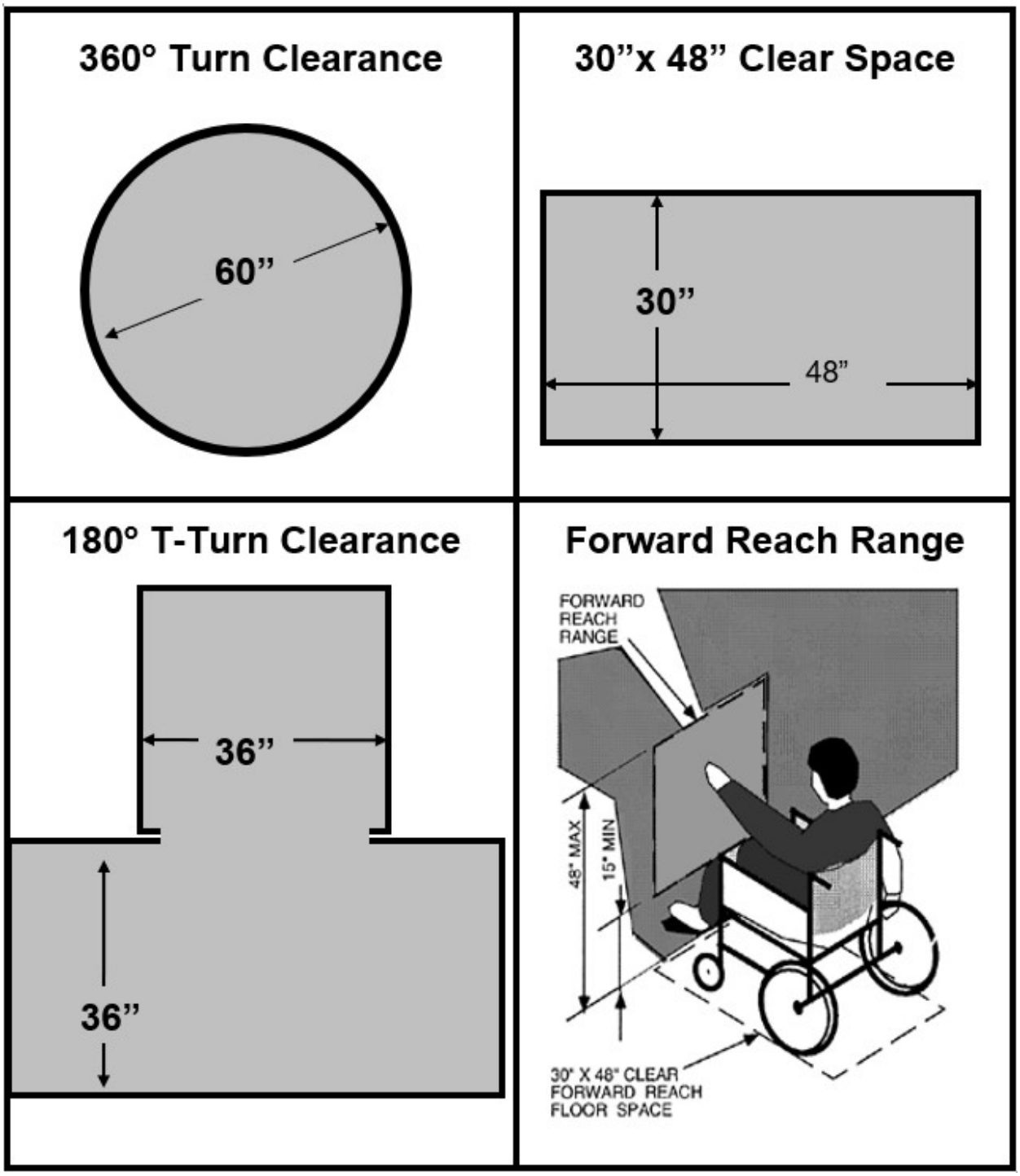

PHYSICAL ACCESS ELEMENTS PREVIEW

Voters with disabilities should be able to arrive on site, approach a building, and enter as freely as everyone else.

EXTERIOR APPROACH AND ENTRANCE
Route from closest public transportation to front door
• Parking and Drop-off Zones • Circulation Path • Ramps and Curb Ramps • Entrances

INTERIOR APPROACH AND CIRCULATION	
Route within one floor level	Route between floor levels
• Doors and Hallways • Voting Area • Signage	• Steps • Elevators • Lifts

INTERIOR SPACES	OPTIONAL RESTROOMS
• Signage for Programs and Services	• Restroom Stalls and Lavatories

Helpful Hints

Before you begin…

1. Identify persons responsible to perform survey i.e., take measurements, mark checklist, and compile survey data into report.
2. Map out survey routes by examining floor plans and/or Internet satellite.
3. Make copies of the individual checklists as needed for each building's feature. For example, if there are two parking lots and six doorways, make two copies of the parking section and six copies of the doors section.
4. Gather necessary survey tools and equipment.
5. Survey tools and equipment may include Digital level (slope measuring tool), digital level carrying case, door pressure gauges, measuring tape (25-foot length recommended). Please allow approximately three weeks of lead-time to purchase these items. Along with the measuring tools, include a clipboard, pens/pencils, and a digital camera.
6. Whenever possible, incorporate photos of elements that are not compliant during the survey process to enhance the final report.
7. To remember where and what element of non-compliance is located in your photos, try writing down the photo number and/or element on a piece of paper folded to stand in front of the picture.
8. Be mindful of weather conditions and traffic when surveying outside elements.
9. Consider utilizing BlueDAG's automated poling checklist

Signs

Pre-Stick Eggshell or Matte Finish Signs for parking, finding the way to the polling place and restrooms.

Large Arrow Signs for finding the way to the polling place and/or restrooms.

Polling Place Accessibility Requirements

1. Parking Area

Sections 11B-208, 11B-302, and 11B-502

If there is a parking lot at the polling place, it shall provide accessible parking. The number of accessible spaces shall be provided according to Table 1 below. (CCR, Section 11B-208.2.)

Table 1
Minimum number of accessible spaces required.

Total Number of Parking Spaces in Lot or Garage	Minimum Required Number of Spaces
1-25	1
26-50	2
51-75	3
76-100	4
101-150	5
151-200	6
201-300	7
301-400	8
401-500	9
501-1,000	Two Percent of Total

If off-street parking spaces are available at the polling place, at least one van-accessible parking space shall be designated for use by people with disabilities. When off-street parking is not available, look for available on-street parking along the property lines that voters with disabilities may use while at the polling place. The requirements, including the accessible route, in these guidelines apply to both on-street and off-street accessible parking.

For every 6 accessible spaces, there shall be 1 van accessible space. (CCR, Section 11B-208.2.4.) (See Table 2 below.) The van accessible space shall be a minimum of 18 feet deep to provide 12 feet for parking and 5 feet for loading and unloading, or 9 feet for parking and 8 feet for loading and unloading. (CCR, Sections 11B-502.2 and 11B- 502.2 Exception) Van accessible spaces shall have the access aisle on the passenger side of the parking space. (CCR, Section 11B-502.3.4.)

Table 2
Required number of van accessible spaces.

Number of Accessible Spaces in Lot or Garage	Minimum Required Van Accessible Spaces
1 to 6	1
7 to 12	2
13 to 18	3
19 to 24	4
25 to 30	5

Additional auto accessible spaces, if required by the Polling Place Accessibility Checklist (PPAC), shall be a minimum of 18 feet deep to provide 9 feet for parking and 5 feet for loading and unloading. Access aisles may be located on either side of auto accessible spaces. (CCR, Sections 11B-502.2, 11B-502.3, and 11B-502.3.4 Exception.)
See Figure 1 below.

All accessible parking spaces and loading/unloading areas shall not exceed 2.08 percent slope in any direction. (CCR, Section 11B-502.4 Exception.)

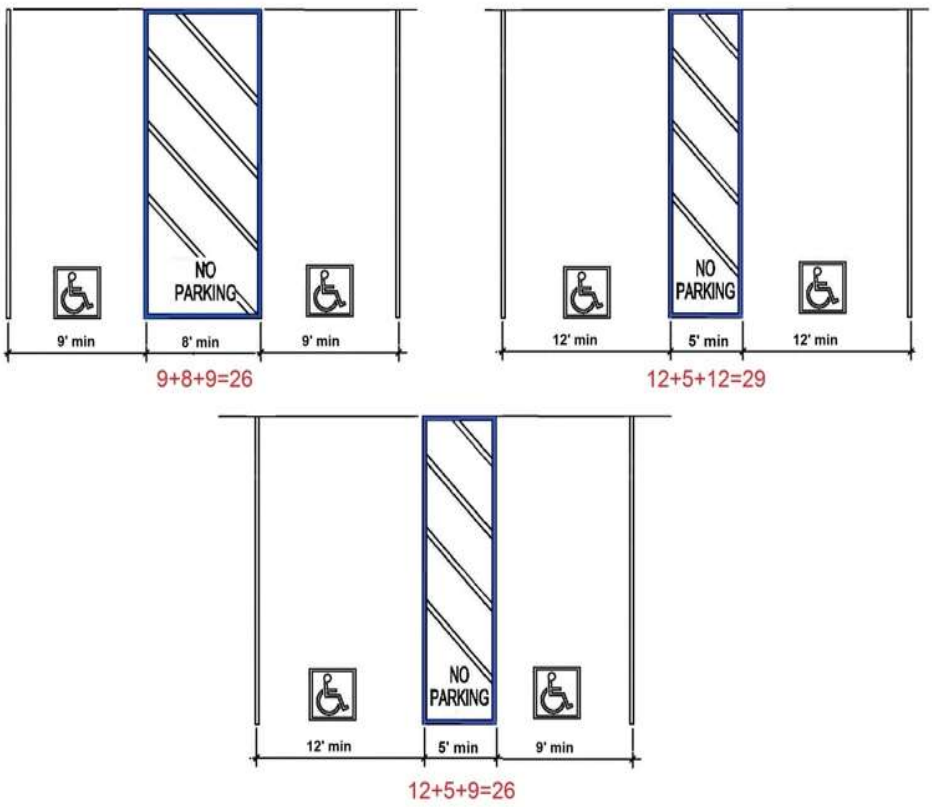

Figure 1: An accessible parking stall

The distance from the designated accessible parking area shall be on the shortest accessible route to an accessible entrance. (CCR, Section 11B-208.3.1.) The shorter the distance to the voting area, the easier it is for voters with heart and lung conditions or other mobility disabilities to vote on Election Day. To provide an accessible route that is also a safe route, the accessible parking spaces shall be arranged so a voter using an accessible space is not required to travel behind any vehicle other than their own. (CCR, Section 11B-502.7.1.) The requirement for a stable, firm, and slip-resistant surface found in Section 2 Accessible Route shall also apply to the accessible parking space and access aisle surfaces. (CCR, Sections 11B-302.1 and 11B-502.4.)

Every accessible parking space shall be clearly marked by a sign having the required International Symbol of Accessibility (ISA) in white on a blue background. The words “Van Accessible” or an additional sign with the words “Van Accessible” shall be added underneath the ISA if the space is intended to be van accessible. The sign shall include additional language or an additional sign below the International Symbol of Accessibility that states "Minimum Fine $250".

Accessible parking signage shall be mounted on a pole or wall at the front of or immediately adjacent to the space at a minimum of 60 inches above the floor or ground surface measured to the bottom of the lowest sign. Signs located within an accessible route shall be a minimum of 80 inches above the floor or ground surface measured to the bottom of the lowest sign. (CCR, Section 11B-502.6 Exception.) See Figure 2.

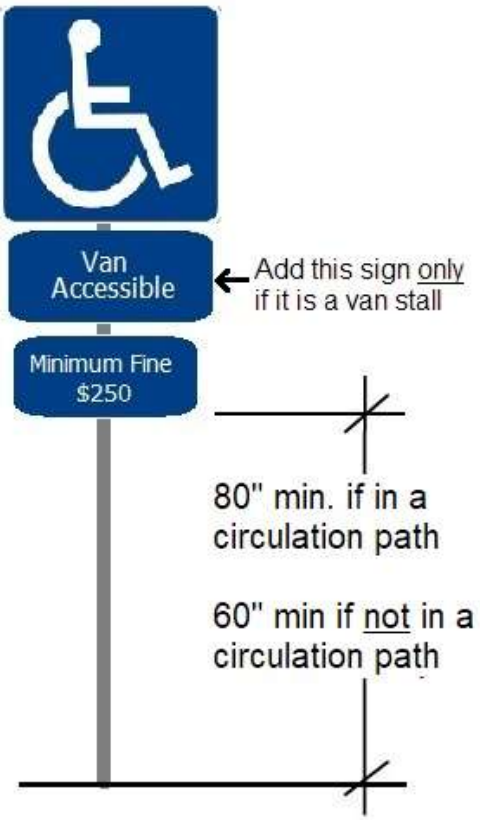

Figure 2: Blue and white signs for van accessible parking and the international symbol of accessibility. The signs are connected to a metal pole.

Parking spaces, access aisles and vehicular routes serving them shall provide a vertical clearance of 98 inches minimum. If parking is provided in a parking structure, then this requirement applies to all entrances and exits, accessible parking spaces with access aisles, and the vehicle routes serving them. This height is required to ensure a safe vehicular path of travel to the accessible parking spaces. (CCR, Section 11B-502.5.)

Drop-off zones may be provided at some polling places. These drop-off zones shall provide a level vehicular pull-up space 8 feet wide minimum by 20 feet long minimum. (CCR, Section 11B-503.2.) Drop-off zones shall provide an access aisle minimum 5 feet wide and shall extend the full length of the vehicular pull up space they serve. (CCR, Sections 11B-503.3.1 and 11B-503.3.2.)

Access aisles shall be marked with a painted borderline around their perimeter. The area within the borderlines shall be marked with hatched lines in a color contrasting with that of the aisle surface and shall not overlap the vehicular way. (CCR, Section 11B- 503.3.3.)

Vehicle pull-up spaces and access aisles serving them shall comply with CCR, Section 11B-302. Access aisles shall be at the same level as the vehicle pull-up space they serve. Changes in level, slopes exceeding 1:48, and detectable warnings shall not be permitted.

Access aisle surfaces shall be level, stable, firm, and slip resistant. (CCR, Section 11B-503.4) See Figure 3. Drop-off zones constructed prior to January 1, 2014, may have access aisles measuring 5 feet wide by 20 feet long without markings. Vehicle pull-up spaces, access aisles serving them, and vehicular route from the entrance, exit and to the space shall have a vertical clearance of 114 inches mnimum.

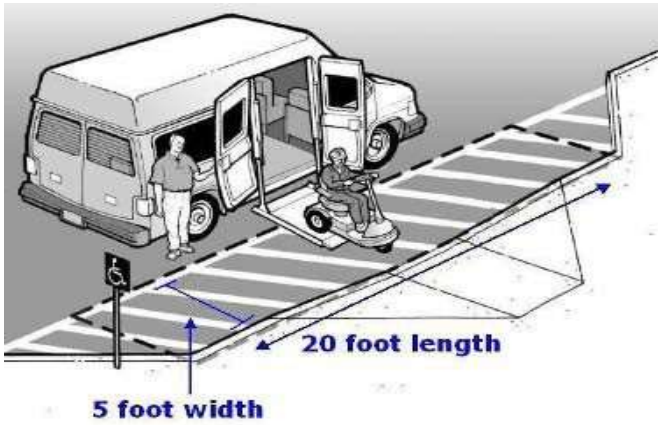

Figure 3: Drop-off zone for passengers.

When necessary, temporary modifying equipment or measures may be used to provide compliance at accessible parking spaces and passenger drop-off zones.

2. Accessible Route

Sections 11B-201, 11B-206, 11B-216, 11B-302, 11B-307, and 11B-403

Where there is more than one point of entry or exit to a building where the voting area is located, these guidelines apply to at least one from each of the following arrival points: accessible parking, accessible drop-off zones, public transportation, and public streets and sidewalks. When accessible drop-off zones or public transportation points are beyond the polling place property line, it is recommended that the accessible route to the voting area be measured to include an accessible route beyond the property line in an effort to include drop-off zones, on-street parking, or public transportation loading and unloading zones. At least one accessible route from the property line to the voting area shall be provided on Election Day. (CCR, Section 11B-206.2.1.) See Figure 4 below.

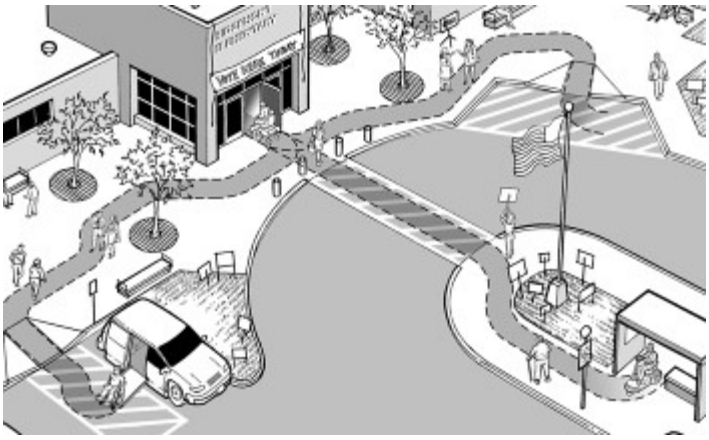

Figure 4: Multiple routes of travel from accessible locations to the polling place.

Sidewalks or other walkways shall be at least 48 inches wide. An exception to the 48 inch clear width is allowed when, due to right-of-way restrictions, natural barriers or other existing conditions, the enforcing agency determines that compliance with the 48 inch clear sidewalk width would create an unreasonable hardship. In this case the clear width may narrow to 36 inches wide (CCR, Section 11B-403.5.1 Exception 3.) An additional exception is allowed when a barrier causes the accessible route to narrow to a width of 32 inches. The 32 inch width may extend a maximum of 24 inches in length. (CCR, Section 11B-403.5.1 Exception 1.)

The maximum cross-slope (the slope that is perpendicular to the direction of travel) of an accessible route is 2.08 percent. (CCR, Section 11B-403.3.) A 2.08 percent slope, (the technical definition of "level") is ¼ inch of height for each 12 inches of distance. A limit to the sideways slope of the sidewalk is important to voters with balance disabilities or voters using walkers or canes.

Accessible routes to the polling place shall be free of steps. Abrupt changes in level from ¼ inch to ½ inch shall be beveled. (CCR, Sections 11B-403.4 and 11B-303.3.) Any changes in height on the accessible route greater than a ½ inch shall be ramped, and routes with a running slope (slope parallel to the direction of travel) greater than 5 percent must also comply with the requirements in Section 6 Ramps, Curb-Ramps, and Slopes. The running slope of sidewalks shall not exceed the general grade established for the adjacent street or highway.

Accessible route surfaces shall be stable, firm, and slip resistant. (CCR, Section 11B-302.1.) For example, sand, gravel, broken and loose cement/asphalt, or wet slippery surfaces may not be accessible.

Openings are restricted to a maximum of ½ inch wide and ½ inch deep regardless of direction of travel. In exterior routes this may occur in grates, utility covers, and concrete expansion joints. If elongated openings are provided, then they shall be placed so that the long dimension is perpendicular to the dominant direction of travel. (CCR, Section 11B-302.3.)

Pedestrian routes intended for voters shall have a vertical clear space at least 80 inches high from the ground or floor. Tree limbs, signs, or other objects placed in the accessible route shall be at least 80 inches above the surface of the ground or floor. When the vertical clear space next to the accessible route is reduced to less than 80 inches, a barrier to warn blind or visually impaired persons shall be provided at 27 inches maximum above the finish floor or ground. (CCR, Section 11B-307.4.)

Circulation paths/Accessible Routes shall be free of objects that project horizontally into the accessible route. When objects such as tree limbs or signs are located at a height between 27 inches and 80 inches above the surface of the ground or floor, they shall not extend into the accessible route more than 4 inches. (CCR, Section 11B-307.2.) Handrails are permitted to protrude a maximum of 4 ½ inches. (CCR, Section 11B-307.2 Exception.) Pole mounted objects between 27 inches and 80 inches above the walking surface can extend into the accessible route up to 12 inches. (CCR, Section 11B-307.3.) See Figure 5.

Objects that extend horizontally into the accessible route shall not reduce the width of the accessible route to less than required by this Section. (CCR, Section 11B-307.5.) See Figure 5.

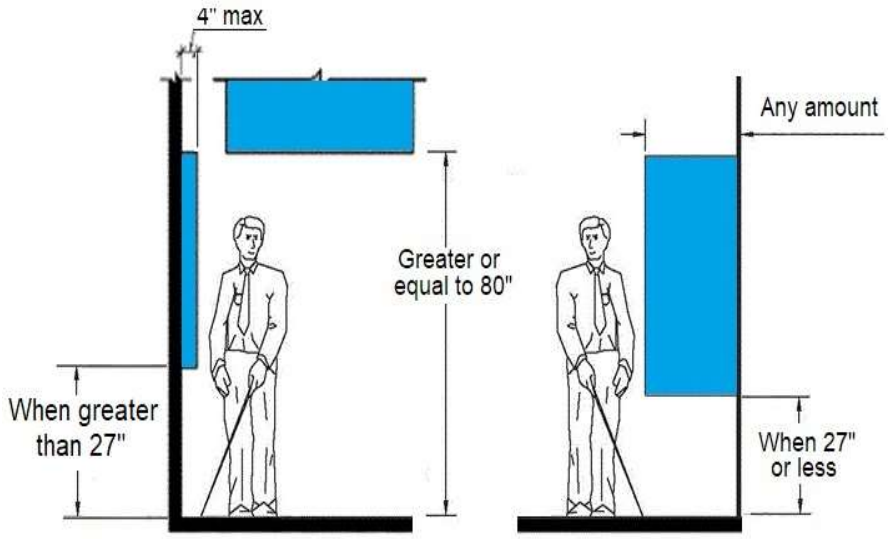

Figure 5: Man using a walking cane to travel under an 80-inch obstruction.

Occasionally there is more than one circulation path to the polling place but only one is accessible. Signs that meet the requirements of Section 5 of these Guidelines shall be used to direct elderly voters and voters with disabilities to the accessible route. The signage should be placed at strategic locations to avoid having individuals backtrack. Non-accessible entrances in existing buildings shall have directional signage indicating the nearest accessible entrance. (CCR, Section 11B-216.6.) See Figure 6.

Figure 6: ISA signs directing individuals to the accessible route to a polling place.

Also, in existing buildings where not all entrances are accessible, the accessible entrance shall be identified by a sign containing the International Symbol of Accessibility. When necessary, temporary modifying equipment or measures may be used to provide compliance along the exterior accessible route. See Figure 6.

3. Doorways, Gates, Hallways and Entrances

Sections 11B-206.4, 11B-403, and 11B-404

Doorways, gates, hallways, and entrances into the voting area shall be connected by an accessible route from public transportation stops from accessible parking and passenger loading zones, and from public streets and sidewalks if these routes are provided. (CCR, Section 11B-206.4.)

The maximum effort to pull or push open a door shall not exceed 5 pounds of force so that voters with disabilities and elderly voters will be able to enter the voting area. This force is different from the force required to operate the door hardware. (CCR, Section 11B-404.2.9.) All doors on the accessible route shall have a clear width of at least 32 inches measured between the face of the door and the stop, with the door open 90 degrees. (CCR, Section 11B-404.2.3.)

The “Strike-side” or “Latch side” of the door is located at the edge of the door opposite the hinges. The strike-side requires a clear space on the pull side of the door that extends 18 inches beyond the edge of the door for interior doors and 24 inches for exterior doors. Some doors have an automatic closing device. If a door has a closer and the door hardware latches shut, the push side of the door requires a clear space that extends 12 inches beyond the edge of the door. (CCR, Sections 11B-404.2.4.1 and 11B-404.3.) See Figure 7.

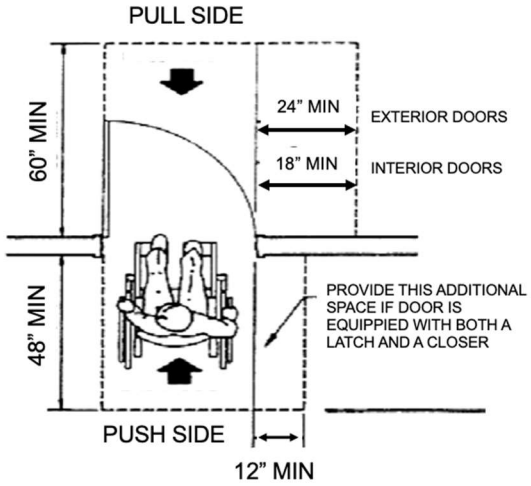

Figure 7: Person using a wheelchair at a doorway illustrating doorway clear space for push side and pull side front approaches.

Entrances require landings with a maximum slope of 2.08 percent in all directions on each side of the door to allow a voter to open and maneuver around a door. All doors shall have a 60 inch landing perpendicular to the door on the pull-side of the door.

On the push side, there shall be a 48 inch landing perpendicular to the door. When two doors are in series, the distance between the two doors in series shall be at least 48 inches plus the width of the door when swinging into the space. (CCR, Sections 11B-404.2.4.1 and 11B-404.2.6.)

All doors shall have a smooth, uninterrupted surface that is a minimum 10 inches high measured from the floor on the push side to allow the door to be opened by a wheelchair footrest without creating a trap or hazardous condition. (CCR, Section 11B- 404.2.10.)

The threshold at the bottom of a doorway may not exceed ½ inch in height. Any vertical surface at the threshold ¼ inch to ½ inch high shall be beveled. (CCR, Section 11B-404.2.5.)

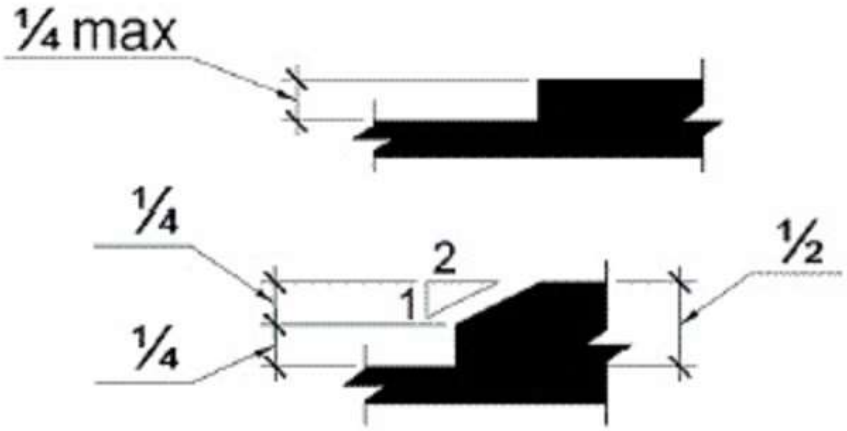

Figure 8: Figure of ¼ inch vertical change in level and a ½ inch change in level that is beveled 1:2.

Hand-activated door opening hardware, such as handles, pulls, latches, locks, and other operating devices shall be easy to operate with one hand without tight grasping, pinching, or twisting of the wrist. The force required to operate hand-activated door hardware shall be 5 pounds or less. The operable part of the door hardware shall be placed between 34 inches and 44 inches above the floor. Latching and locking doors that are hand-activated and are located on the accessible route shall be operable with a single effort by lever-type hardware, panic bars, push-pull activating bars or other similar hardware. (CCR, Sections 11B-404.2.7 and 11B-309.4.) See Figure 8.

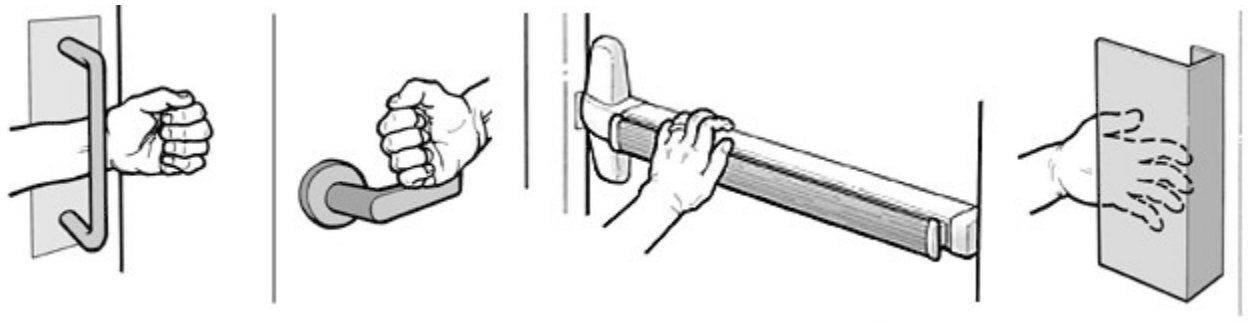

Figure 9: Hand-activated door opening hardware including handles, pulls, and latches.

When hallways exceed 200 feet in length, there shall be passing spaces 60 inches by 60 inches, at intervals no more than 200 feet apart. A “T” intersection of two corridors or walks is an acceptable passing place. (CCR, Section 11B-403.5.3.) See Figure 10(a) and 10(b).

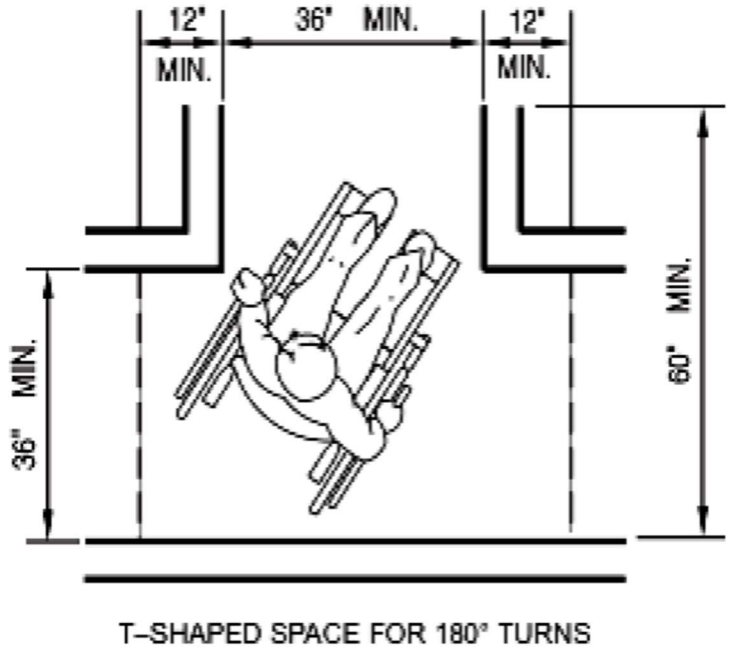

Figure 10 (a): Person using a wheelchair within a "T" intersection with measurements.

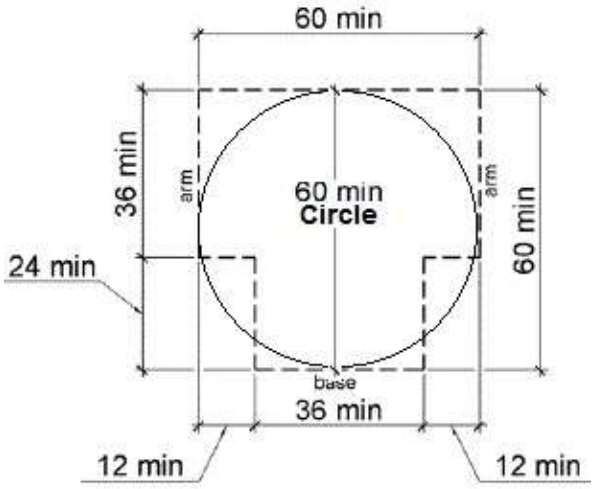

Figure 10 (b): Diagram of 60 inch diameter circle and a superimposed T-Shaped turning space.

Other requirements for the interior accessible route may include the slope, cross-slope, overhead clear space, protruding objects, changes in level, and stable, firm, and slip- resistant surfaces, or other accessible route features as explained in Section 2 Accessible Route.

4. The Voting Area

Sections 11B-206,11B-216, 11B-302, 11B-303, 11B-305, 11B-307, and 11B-308

At least one accessible route shall connect accessible building or facility entrances with all accessible spaces and elements within the building or facility. Therefore, elements in the voting area such as seats, tables, voting equipment, emergency exits, or similar elements, shall be located along accessible aisles that lead to an exit. (CCR, Section 11B-206.2.4.) See Figure 11.

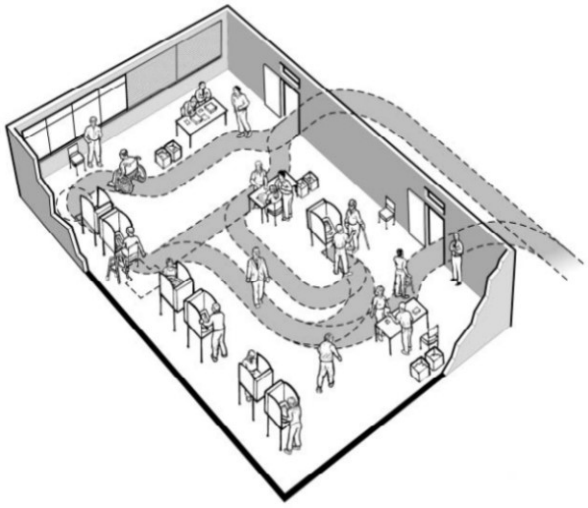

Figure 11: Accessible routes within a polling place voting *a*rea.

When voters enter the voting area, a stable, firm, and slip-resistant accessible route shall be provided. (CCR, Section 11B-302.1.) For that reason, hardwood or waxed floors that are not slip-resistant, deep pile carpet, loose carpets, or throw rugs are not recommended. For example, polished hardwood or waxed floors can become a slipping hazard, while deep pile carpet can be difficult for a person using a wheelchair to wheel across. Loose carpets or throw rugs can cause a tripping hazard.

In the event of an emergency, locked exit doors shall have accessible hardware so voters and poll workers may have an additional way to exit the building. Emergency alarms shall be placed in all public areas and meeting rooms. Alarms shall have both visual and auditory alerts when triggered. (CCR, Sections 11B-309.4 and 11B-404.2.7 and 11B-702.1.)

The voting area shall also be free of objects that protrude into the accessible route, such as lighting, shelves, or wall mounted telephones. When objects mounted on walls are placed at a height between 27 inches and 80 inches above the floor, they shall not extend into the accessible route more than 4 inches. (CCR, Section 11B-307.2.)

The 4-inch limitation provides a measure of safety when voters with limited vision are using the accessible route. See Figure 12 (a) for an example of an item protruding 4 inches into the accessible route.

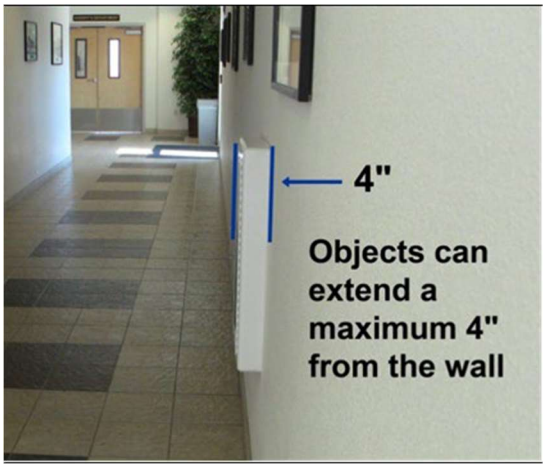

Figure 12 (a): Object protruding 4 inches into the accessible route between 27 inches and 80 inches high.

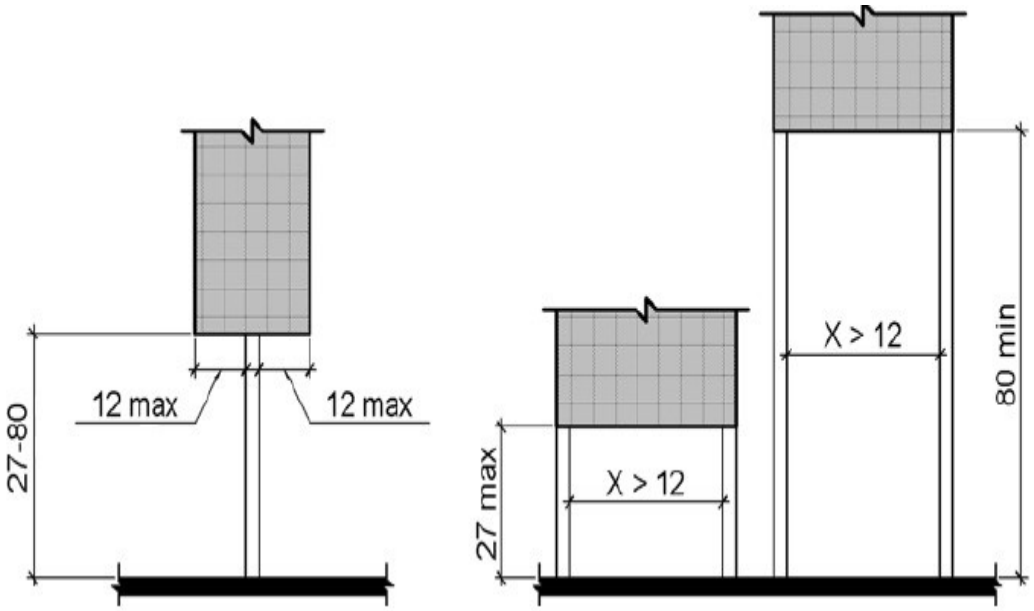

Figure 12 (a): Pole mounted objects protruding 12 inches into the accessible route between 27 inches and 80 inches high.

Pole mounted objects between 27 inches and 80 inches above the walking surface can extend into the accessible route up to 12 inches. (CCR, Section 11B-307.3.)

A person using a wheelchair for mobility will require a clear floor space of 60 inches in diameter or a T-shaped space to turn around and maneuver their wheelchair in the voting area. (CCR, Sections 11B-304.3.1 and 11B-304.3.2.) The minimum clear floor or ground space required to accommodate a person using a wheelchair shall be 30 inches by 48 inches. (CCR, Section 11B-305.3.) Provide a 60 inch turning space or T-shaped space in front of at least one voting station such as a voting booth or table and one accessible voting machine. See Figure 13.

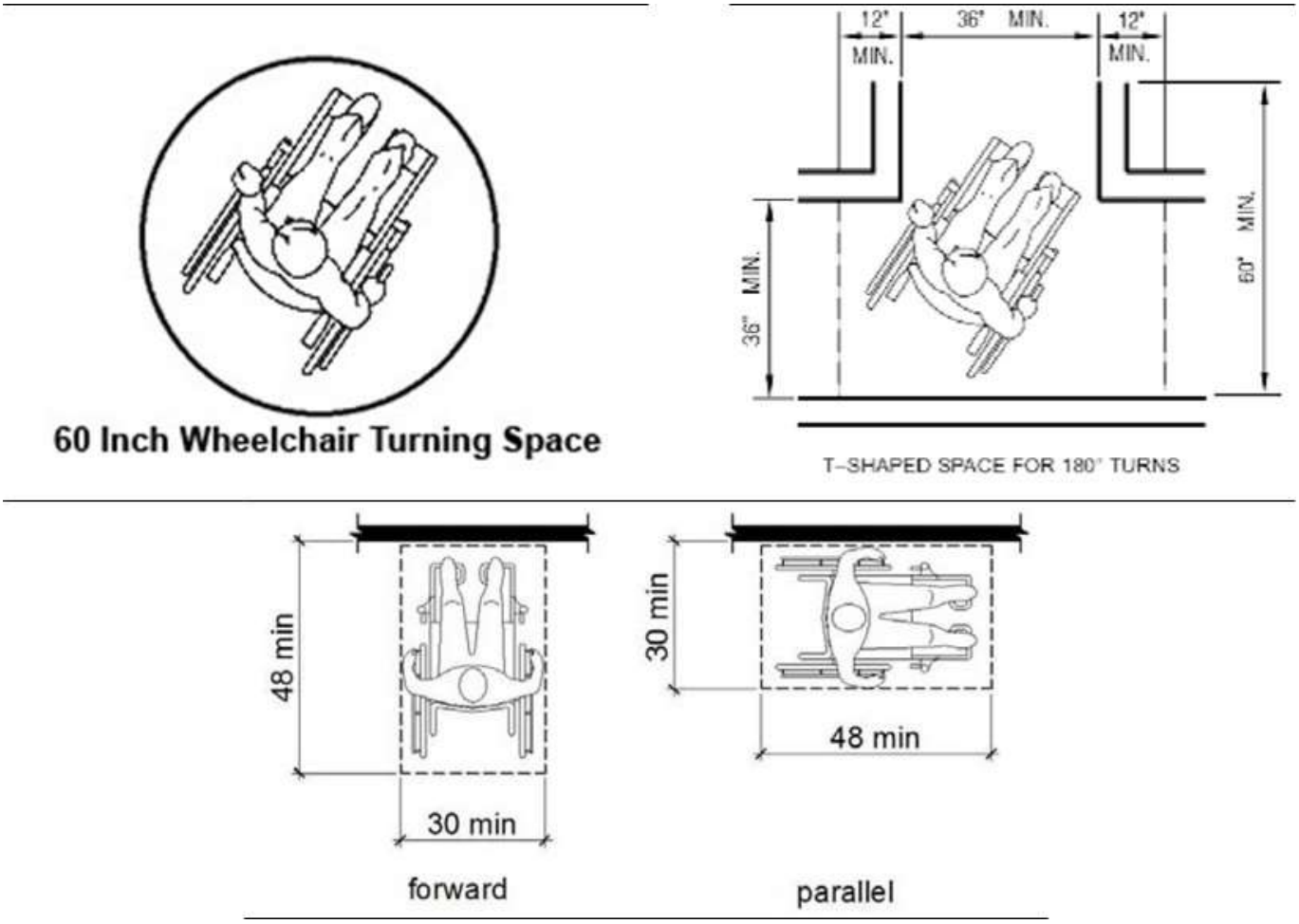

Figure 13: Diagrams showing the 60 inches turning space, the "T" shaped turning space, and the 30 inches by 48 inches clear floor space.

Accessible tables in the voting area shall be between 28 inches to 34 inches from the floor. (CCR, Section 11B-902.3.) Under each accessible table, there shall be a clear space at least 19 inches deep, 30 inches wide, (CCR, Section 11B-306.2.5.) and 27 inches from the floor as shown in Figure 14. (CCR, Section 11B-306.3.3 Exception 2.) The 30 inch by 48-inch clear floor space required for wheelchairs at tables may be combined with the knee space under tables and voting stations.

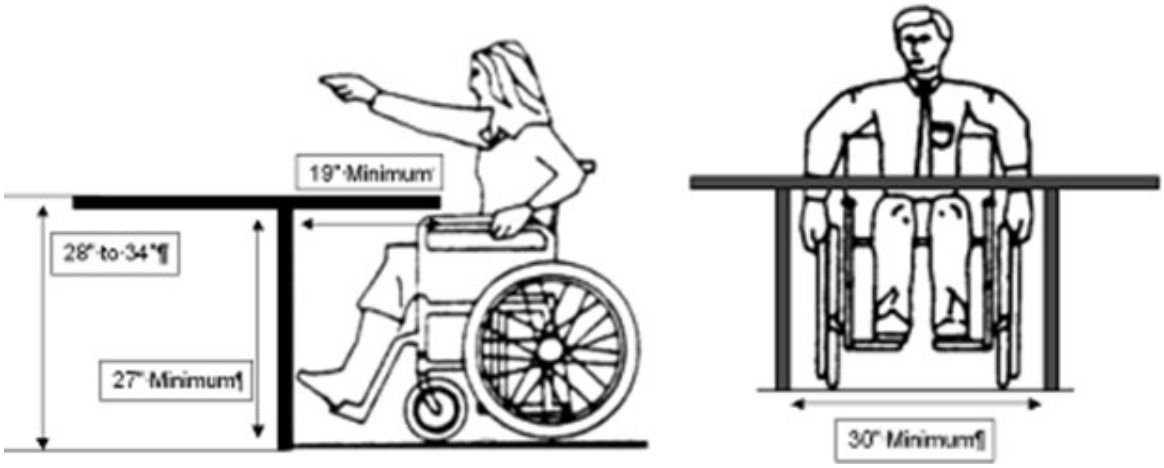

Figure 14: Individuals in wheelchairs showing unobstructed measurements for accessible tables.

Elderly voters and voters with disabilities shall be able to approach the voter sign-in or other writing tables from a forward or side/parallel position. Tables used as a base for voting equipment shall provide a forward or side approach as shown in Figure 15. The voting equipment shall be placed at a height where operable controls throughout their full range of movement are no higher than 48 inches above the floor for a front or side reach. (CCR, Sections 11B-308.2 and 11B-308.3.) This includes the highest voting target or menu buttons on the accessible voting equipment and all operable parts.

Providing both a forward and parallel approach to voting equipment, a sign-in station, or other accessible tables is not required by building codes or other accessibility standards. However, Title II of the Americans with Disabilities Act requires every county to make their program accessible to voters with disabilities. For this reason, the Secretary of State encourages counties to make both a forward and parallel approach available to voters with disabilities in order to provide a meaningful opportunity for voters with disabilities to vote independently and with privacy. (28 CFR 35.149 and 35.150(a).) See Figure 15.

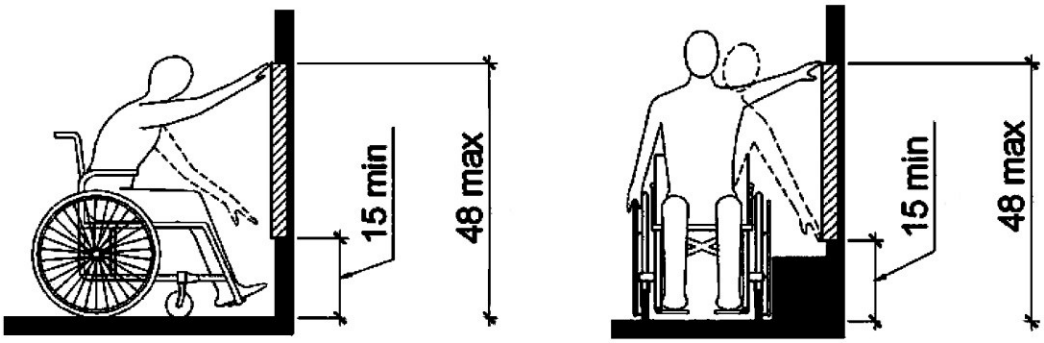

Figure 15: Individuals in wheelchairs showing unobstructed high and low, forward and side reach limit measurements.

Other requirements for the interior accessible route in the voting area may include the slope, cross-slope, overhead clear space, protruding objects, changes in level, and stable, firm, and slip- resistant surfaces, or other items as explained in Section 2 Accessible Route. Additional ways of providing accommodation in the voting area may include assigning a poll worker the duty of providing wayfinding throughout the day and during emergencies.

5. Signage

Sections 11B-216 and 11B-703

Signage is used extensively on Election Day to direct voters arriving at the polling place to the voting area. However, not all areas or features of a building open on Election Day are under the jurisdiction of county elections officials. For this reason, those areas of a facility used by county elections officials shall be clearly marked to provide accessibility for all voters. (CCR, Sections 11B-216.2 and 11B-216.3.)

When a voter arrives at the polling place, several signs may be necessary to show elderly voters and voters with disabilities where to vote. All directional entrance signs placed at arrival points to the polling place shall conform with this section. Additional directional signs shall be provided to guide voters toward and through the accessible route to the voting area whenever that path diverges from the regular circulation path/accessible route. (CCR, Sections 11B-216.6 and 11B-703.5.)

The standard symbol used to identify facilities and features that are accessible to elderly voters and persons with disabilities is the International Symbol of Accessibility (ISA). The ISA used by county elections officials consists of a white figure on a blue background. (CCR, Section 11B-703.7.2.1.) See Figure 16.

Figure 16: International Symbol of Accessibility (ISA)

Providing way-finding signage to the voting area is accomplished by using the ISA in conjunction with large bold arrows and/or other directional symbols. All accessible signage regardless of content shall have a non-glare finish. (CCR, Sections 11B-216.6 and 11B-703.5.1.) For signage that must be laminated to withstand exterior weather conditions, it is recommended that a matte or eggshell finish laminate be applied to reduce glare.

Accessible signs shall also have character and symbol colors that contrast with the background color. (Dark on a light background or light on a dark background.) (CCR, Sections 11B-703.5.1 and 11B-703.7.1.)
See Figure 17.

Figure 17: Accessible sign showing light characters on a dark background.

At polling sites where not all entrances are accessible, those entrances that comply with these guidelines shall be identified with an ISA. Entrances which are not accessible on Election Day shall have directional signage that indicates the route to the nearest accessible entrance. Directional signs must be placed at the inaccessible entrance or at the junction where the accessible route diverges from the non-accessible route. (CCR, Section 11B-216.6.) Directional signs shall have contrasting colors and non-glare finish (CCR, Sections 11B-216.6 and 11B-703.5.1.) Directional and informational signs do not require raised letters and Braille. See Figure 18.

Figure 18: Accessible directional signage indicating the route to the accessible polling place entrance.

Permanent rooms and spaces identified with names or room numbers that are used by elections officials shall be identified with signs containing the corresponding names and numbers in raised letters/numerals and Braille. (CCR, Sections 11B-703 and 11B-703.2.)

These signs shall be installed on the wall adjacent to the latch-side, or strike-side edge, of the door. If there is no wall space on the latch-side of the door (for example double doors) signs shall be placed on the nearest adjacent wall, preferably on the right side. (CCR, Sections 11B-703.4.2 and 11B-703.5.) See Figure 19.

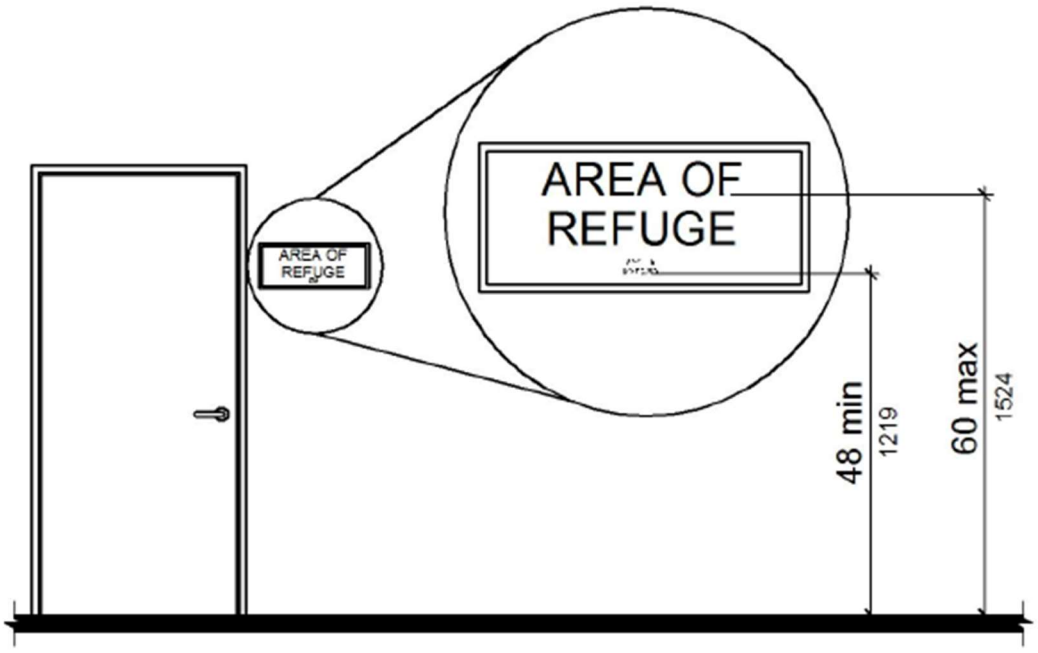

Figure 19: Diagram showing height of a wall sign tactile characters above finished floor or ground

Tactile characters on signs shall be placed so the lowest part of any Braille cell is 48 inches or higher above the floor and the bottom of any tactile letter is no more than 60 inches above the floor measured from the baseline of raised characters. (CCR, Sections 11B-703.4.1 and 11B-703.4.2.) See Figure 20.

Figure 20: Mounting height for Braille and Raised Characters.

A voter shall be able to approach the sign without encountering protruding objects or standing/wheeling within the swing of a door. Signs containing tactile characters shall be located so that a clear floor space of 18 inches by 18 inches minimum, centered on the tactile characters, must be provided beyond the arc of the door swing between the closed position and 45 degree open position. (CCR, Section 11B-703.4.2.) See Figure 21.

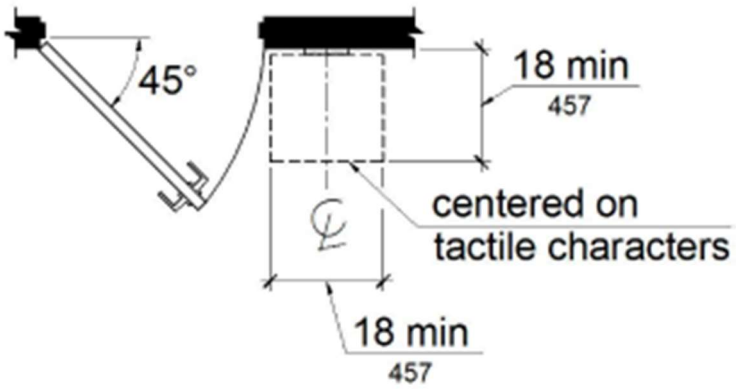

Figure 21: Diagram showing the location of tactile signs at doors.

Additional ways of accommodation provided in the voting area may include assigning a poll worker the duty of providing wayfinding throughout the day and during emergencies.

6. Ramps, Curb-Ramps and Slopes

Sections 11B-405, 11B-406, and 11B-505

When slopes are encountered on the route to a polling place, they fit into three categories:

1. When a slope measures 5 percent or less, it is not a ramp; it is merely a slope in the circulation path/accessible route.
2. When a slope measures more than 5 percent, it is considered a ramp. (Exception: The running slope of sidewalks shall not exceed the general grade established for the adjacent street or highway (CCR, Section 11B-404.3 Exception.)
3. When a slope provides access across a curb, it is defined as a curb-ramp or curb-cut.

The maximum slope allowed for any ramp that provides access for elderly voters and voters with disabilities is 8.33 percent. (CCR, Section 11B-405.2.) The percent of slope is determined by dividing the number of inches of vertical rise (height) for each 12 inches of horizontal run (length). For example, a slope with 1 inch of vertical rise for every 12 inches of horizontal run equals the maximum slope of 8.33 percent (1／12 = 8.33 percent). (Similar to Section 2, Accessible Route, when ramps slope to the side, a maximum cross-slope of 2.08 percent is allowed.) (CCR, Section 11B-405.3.)

Ramps

Ramps shall be a minimum of 48 inches wide with level landings at both the top and bottom of every ramp. (CCR, Sections 11B-405.5, 11B-405.7 and 11B-405.7.1.)

Top landings shall be at least 60 inches wide and 60 inches long. Bottom landings shall be at least 72 inches long and as wide as the ramp. (CCR, Sections 11B-405.7.2.1, 11B-405.7.3 and 11B-405.7.3.1.)

Another type of landing is called an "intermediate landing." When the sloped area of a ramp rises vertically to a height of 30 inches above the bottom landing, the ramp shall end or there shall be a break in the slope for a level intermediate landing 60 inches long minimum. (CCR, Section 11B-405.6.)

If a ramp changes direction at an intermediate landing, the intermediate landing shall be at least 60 inches wide by 72 inches long in the direction of downward travel from the upper ramp run and have a maximum slope of 2.08 percent in all directions. (CCR, Section 11B-405.7.4.) See Figure 22. At bottom and intermediate landings, the landing width shall be at least as wide as the ramp. (CCR, Section 11B-405.7.2.)

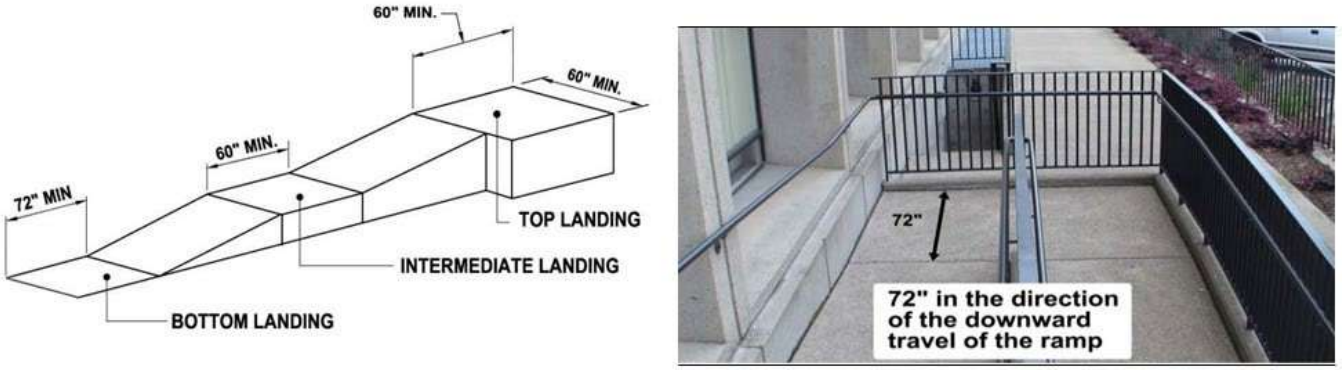

Figure 22: Ramps showing landings and a change of direction at intermediate landing.

If a ramp is not adjacent to a wall, a curb or barrier shall be provided that prevents the passage of a 4-inch diameter sphere, where any portion of the sphere is within 4 inches 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. See figure 23 (a).

Edge protection on one side of the ramp is permitted when the other side adjoins a wall or other vertical surface. (CCR, Section 11B-405.9.) See Figure 23 (b).

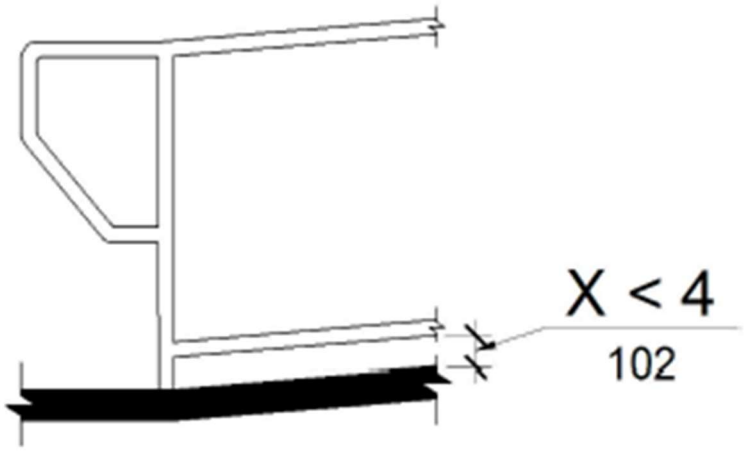

Figure 23 (a): Diagram of a ram showing edge protections within 4 inches of the bottom of the ramp run.

Figure 21(b): Accessible ramp with edge protection.

Handrails that provide continuous support are required on both sides of a ramp and shall continue at least 12 inches past the end of the ramp surface. (CCR, Sections 11B-505.2, 11B-505.3 and 11B-505.10.1) See Figure 22. The handrail extensions shall be rounded or return to the ground, a wall, or post as shown in Figure 21 (b). By extending the handrail 12 inches past the slope of the ramp, voters with balance difficulties will be on a level surface when they release their grip on the handrail. (CCR, Section 11B-505.5.10.1.)

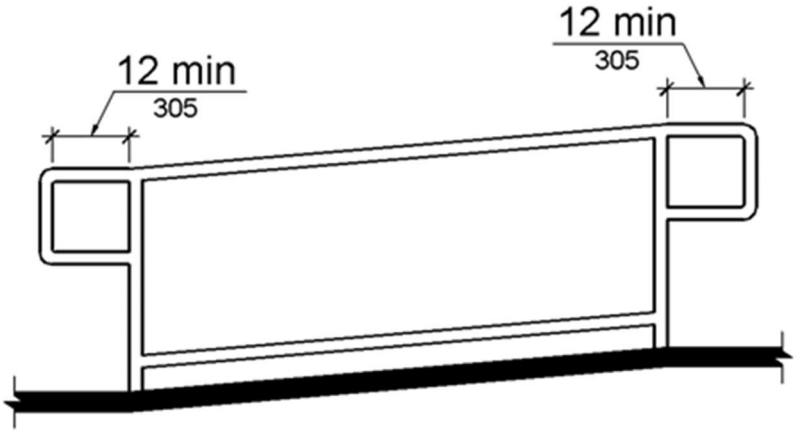

Figure 22: Diagram showing 12 inch handrail extensions at the top and bottom of a ramp.

Circular handrails shall have a diameter of 1 ¼ inches to 2 inches. Non-circular handrails shall have a perimeter of 4 inches minimum and 6 ¼ inches maximum and a cross section dimension of 2 ¼ inches maximum. (CCR, Sections 11B-505.7.1 and 11B-505.7.2.) See Figure 23 (a).

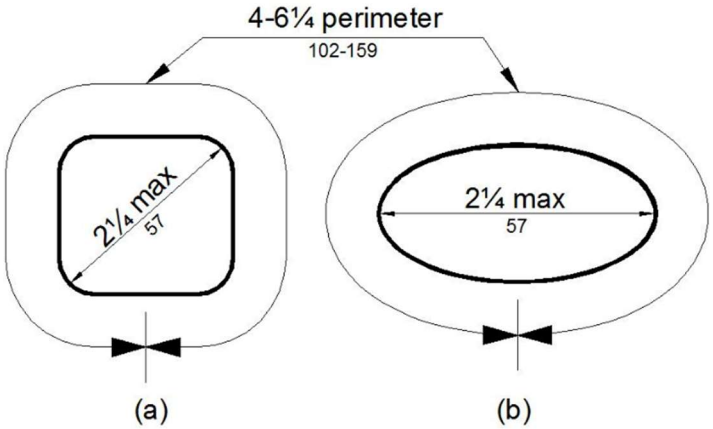

Figure 23 (a): Diagram showing handrails with non-circular cross sections.

When handrails are mounted on a wall, the gap between the handrail and the wall shall be at least 1 ½ inches. (CCR, Section 11B-505.5.) Handrails shall be placed on both sides of the ramp. They shall be continuous the full length of the ramp and shall be mounted 34 to 38 inches above the ramp surface measured to the top of the handrails. (CCR, Sections 11B-505.2 and 11B-505.4.) See Figure 23 (b).

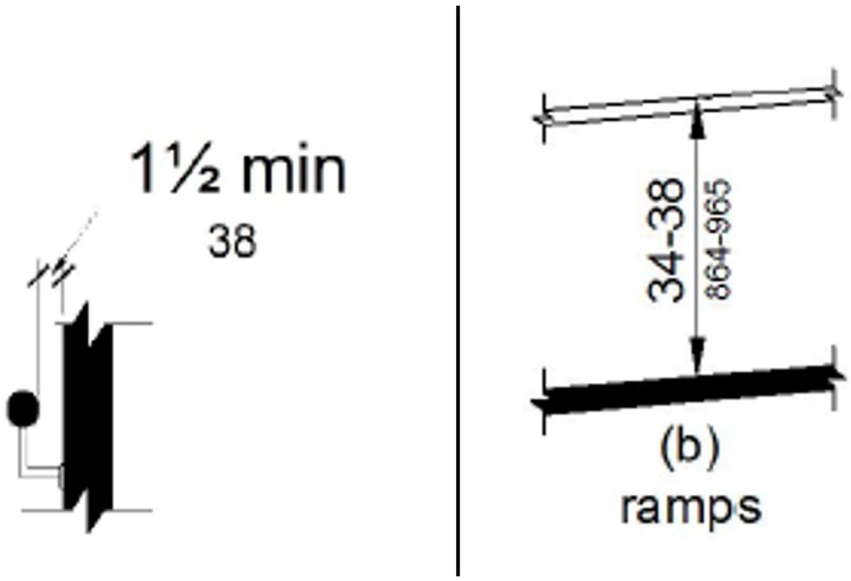

Figure 23 (b): Diagram showing the handrail clearance to adjacent surface and handrail height.

When a ramp has a change in direction, the inside rail shall be continuous from landing to landing as shown in Figure 24. (CCR, Sections 11B-505.2 and 11B-505.3.) At exterior doors, when the top landing and door landing overlap, a ramp does not require handrails if it is less than 6 inches high or 72 inches in length. (CCR, Sections 11B-505.2 Exception 3 and 11B-505.3.)

Figure 24: Ramp with continuous handrails.

Curb-Ramps

When a pedestrian route crosses a curb, a slope is required at the curb face or preferably cut into the curb as shown in Figure 25. (CCR, Section 11B-303.4.)

Unlike ramps, curb-ramps do not require handrails. Instead, the curb-ramp will have side flares to prevent a voter with limited vision or a mobility disability from traveling off to the side of the curb-ramp slope. See Figure 23.

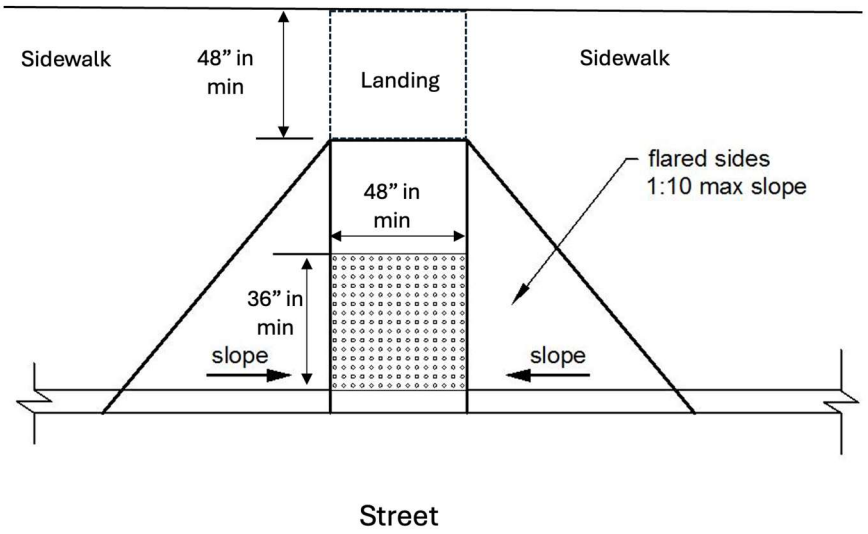

Figure 25: Perpendicular Curb ramp.

Similar to ramps, a curb-ramp shall have a maximum running slope of 8.33 percent and a maximum cross slope of 2.08 percent. The width shall be at least 48 inches. (CCR, Section 11B-406.5.2.) However, the landing dimensions for curb-ramps are different from ramps. The top landing of a curb-ramp shall be a minimum of 48 inches long to provide a resting place for someone who has just traveled up the curb ramp slope. To rest at the top of the slope also means the top landing shall be level. The bottom landing shall also be at least 48 inches long. (CCR, Section 11B-406.5.9. The maximum running slope allowed for the first 24 inches of the bottom landing shall be 5 percent or less. (CCR, Section 11B-406.5.8.)

It is important to remember that ramps and curb-ramps are a part of an accessible route that includes the cross-slope, overhead clear space, protruding objects, changes in level, and stable, firm, and slip-resistant surfaces as explained in Section 2, Accessible Route.

7. Elevators and Lifts

Sections 11B-206.6 and 11B-407

Elevators

If an elevator is the only accessible route to the voting room, it shall be accessible. Elevators that are adjacent to the voting area, but are not needed to enter the voting area, need not be surveyed. The call buttons used to summon each elevator shall be 48 inches maximum above the floor measured to the centerline of the highest operable part. (CCR, Sections 11B-407.2.1.1 and 11B-308.3.1.)

These buttons shall be raised above their surrounding surface as shown in Figure 24. (CCR, Section 11B-407.2.1.2.) Each button shall contain a white light that goes on when the button is activated and goes out when the elevator car arrives. (CCR, Section 11B-407.2.1.5.) A 30 inch by 48-inch unobstructed clear floor space shall be provided in front of the hall call buttons. (CCR, Sections 11B-407.2.1.3 and 11B-305.3.)

Objects placed adjacent to the call buttons shall not project more than 10 inches from the wall when a side approach is available. If there is only a front approach to the call buttons, no obstruction is allowed. (CCR, Sections 11B-308.3 and 11B-308.2.)

Figure 26: Up and down elevator hallway call buttons.

After a call, when the elevator arrives at floor level, it shall provide an audible and visual signal. An audible signal is a tone that sounds once if the elevator is going up, and twice if the elevator is going down.

Newer elevators may use computer synthesized voices to announce car arrival and direction. (CCR, Sections 11B-407.2.2.1 and 11B-407.2.2.3.)

Two visual signals (one for up, another for down) are also required to confirm the up or down direction on the elevator. The individual calling the elevator shall be able to see the up and down signals near the hall call buttons light up, whether the signals are mounted in the lobby or on the elevator car. The visual signals shall be at least 2½ inches high and 2½ inches wide. To be seen, the visual signals shall be installed at least 6 feet above the floor. (CCR, Sections 11B-407.2.2.1 and 11B-407.2.2.2.)

The elevator door shall open at least 36 inches for entry and exit. (CCR, Sections 11B-407.3.6 and 11B-407.4.1.)

When the elevator door opens in the center, the inside of the elevator is required to be at least 80 inches wide and 51 inches deep (measured from the front wall to the back wall). A side-opening door allows a smaller car width of 68 inches as shown in Figure 25. In buildings with older elevators, the inside of the car can be as small as 48 inches wide by 54 inches deep. (CCR, Section 11B-407.4.1 Exception.) Elevators installed prior to January 1, 2014, may be as small as 48 inches wide by 48 inches deep.

	Minimum Dimensions			
Door Location	**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	80 inches	51 inches	54 inches
Side (off-centered)	36 inches[1]	68 inches	51 inches	54 inches
Any	36 inches[1]	54 inches	80 inches	80 inches
Any	36 inches[2]	60 inches[2]	60 inches[2]	60 inches[2]

1. A tolerance of minus ⅝ inch is permitted.
2. Other car configurations that provide a turning space complying with *11B*-304 (Turning Space) with the door closed shall be permitted.

Figure 27: Table showing measurements for minimum dimensions of elevator cars.

At each elevator entrance, there is a gap between the floor outside the elevator and the elevator car. This gap shall be no larger than 1¼ inches wide. (CCR, Section 11B-407.4.3.) The limited space serves to prevent a wheelchair wheel or a mobility assistance device from falling into the gap. It is recommended that the elevator stop at floor level, placing the floor of the elevator even with the lobby landing. However, it is permissible to have the elevator floor stop within ½ inch above or below the lobby floor.

On each side of the lobby elevator landing, the frame (doorjamb) shall have a sign installed indicating the floor designation in raised characters and Braille. The raised characters shall be at least 2 inches high with the Braille placed immediately below. (CCR, Section 11B-407.2.3.1.) See Figure 28.

Figure 28: Signs within the door jamb or frame of the elevator landing indicating the floor designation.

The main entry floor, that floor where voters enter and exit the building, shall have a raised five-point star that is also 2 inches high placed on the left side of the raised character as shown in Figure 27. (CCR, Section 11B-407.2.3.1.)

Figure 29: A raised five-point star on the left side of the main floor number.

These signs shall be placed so the lowest part of any Braille cell is 48 inches or higher above the floor and the bottom of any tactile letter is no more than 60 inches above the floor measured from the baseline of raised characters. (CCR, Section 11B-703.4.1.)

When the elevator arrives and the door opens, it shall remain open at least 5 seconds to allow a person to enter through the doorway. (CCR, Section 11B-407.3.5.) If the door starts to close while someone is in the doorway, a potential for injury is present. For this reason, all elevator doors required to be accessible on Election Day shall be equipped with an automatic door re- opening device that can detect the presence of a person in the doorway without contact. When a door re-opening device is activated, the door shall remain open a minimum of 20 seconds to allow anyone to move completely in or out of the elevator. (CCR, Sections 11B-407.3.3, 11B-407.3.3.2 and 11B-407.3.3.3.)

Once inside the elevator, a person may move directly in front of the car control buttons for an unobstructed front approach or a side approach. When a front approach is used, the center of the highest car control button shall be a maximum of 48 inches above the car floor. In existing elevators with a side approach, the center of the car control button shall be no higher than 54 inches. (CCR, Sections 11B-308.2, 11B-308.3, and 11B-407.4.6.1 Exception 2) Whether a voter will make a side approach or front approach depends on the interior dimensions of the elevator and the location of the elevator door.

Elevator control buttons shall also be illuminated. When a voter presses a button in the elevator, the traditional visual indicator, a light "inside" or encircling the button, illuminates to confirm the button is activated. The light goes out when the elevator completes each request. (CCR, Section 11B-407.4.6.2.3.)

A visual indicator is required to show the location of the elevator when it stops at or passes a floor level. This indicator shall be placed above the control panel or above the door. (CCR, Section 11B-407.4.8.1.2.) The numbers used to show the floor location shall be at least ½ inch high. (CCR, Section 11B-407.4.8.1.1.)

As the car passes or stops at a floor, the corresponding floor number lights up and an audible signal sounds. The audible signal is a synthesized voice saying, "going up," "going down," or the floor number. (CCR, Section 11B-407.4.8.2.1 and 11B-407.4.8.1.3.) Existing elevators having a tone that sounds once if the elevator is going up, and twice if the elevator is going down also comply with these guidelines.

Raised characters required on the left of each control button provide visual and tactile identification. (CCR, Sections 11B-407.4.7.1.2 and 11B-703.2.5.) The minimum 5/8-inch-high characters provide a visual button identification through a contrasting white on a black background. The tactile identification from the raised characters is accompanied by corresponding Braille placed immediately below the raised characters. See Figure 30.

The additional symbol of a raised star is required on the left side of the raised character and Braille identifying the main floor control button. (CCR, Section 11B-407.4.7.1.3.)

Figure 30: Elevator buttons with five-point star, Braille, and raised characters.

Larger elevators may have more than one set of controls. In those cases, only one set of controls is required to comply. (CCR, Section 11B-407.4.7 Exception.)

Emergency control buttons shall have their centerlines 35 inches minimum above the floor. (CCR, Section 11B-407.4.6.4.1.)

Emergency two-way communication within the elevator shall be identified with the proper raised characters and Braille as required for control buttons. Two-way communication systems shall provide both audible and visual signals. (CCR, Sections 11B-407.4.7.1.3 and 11B-708.2.) Audible and visual signals allow voters with disabilities to summon rescue personnel without relying on voice communication. If a handset is provided, the cord shall be at least 29 inches long. (CCR, Section 11B-708.3.) When the emergency system is behind a closed door, lever style hardware that does not require tight grasping, pinching, or twisting of the wrist is required. (CCR, Section 11B-407.4.9.)

In every elevator, a smooth/graspable handrail is required on one wall of the car. The handrail shall be positioned 31 inches to 33 inches above the elevator floor when measured to the top of the handrail. Handrails shall have a gap of at least 1 ½ inches between the handrail and the wall. The ends of the handrail rail shall be 6" maximum from adjacent walls. (CCR, Section 11B-407.4.10.)

Lifts

Wheelchair lifts may be provided between levels instead of passenger elevators. Lifts typically provide access where existing limitations prevent the use of a ramp or an elevator. If a lift is provided, it shall allow unassisted entry, operation, and exit. (CCR, Section 11B-410.1.) For unassisted entry and exit, lift doors shall have at least 32 inches clear width for a front approach or 42-inch clear width for a side approach. (CCR, Section 11B-410.1.)

For unassisted operation, voters shall be able to activate the lift controls with one hand without tight grasping, pinching, or twisting of the wrist. (CCR, Sections 11B-410.5 and 11B-309.4)

The top and bottom landing areas where voters enter or exit the lift shall be a minimum size of 60 inches by 60 inches. (CCR, Section 11B-410.7.) Lifts installed prior to January 1, 2014, may have smaller landing dimensions if it is determined that a person using a 30 inch by 48-inch wheelchair can enter and operate the lift safely. See Figure 29.

To ensure continued operation in case of primary power loss, platform (wheelchair) 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. (CCR, Section 11B-207.2.)

Figure 31: Wheelchair lift.

A simple way to modify protruding objects, such as garbage cans or plants, in front of elevator door/lift controls or buttons is to relocate these objects.

8. Restrooms

Sections 11B-603, 11B-604, 11B-606, 11B-609, and 11B-213

Not all restrooms or features of a building are open on Election Day. However, if there is a restroom available to voters on Election Day, the restroom shall be accessible. When restrooms are available to voters on Election Day, they shall be on an accessible route. (CCR, Section 11B-403.1.) Accessible restrooms shall be identified with an International Symbol of Accessibility (ISA). (CCR, Section 11B-216.8). Restrooms designated for children's use shall not be used. Restroom entrances shall comply with the requirements in Section 3 Doors, Hallways and Entrances. (CCR, Sections 11B-206.4 and 11B-404.1)

There are two types of restrooms: single accommodation and multiple accommodation. Single accommodation restrooms are designed for use by one person at a time behind a door with a privacy lock. Multiple accommodation restrooms allow more than one person at a time to enter and exit the restroom.

There are two sets of restroom signs surveyors may find at the entrance of every restroom. The first set of signs with Braille and raised characters are only required when restrooms are identified with visual signs. These Braille and raised character signs, located on the strike side edge of the door, shall be placed so the lowest part of any Braille cell is 48 inches or higher above the floor and the bottom of any tactile letter is no more than 60 inches above the floor measured from the baseline of raised characters. (CCR, Sections 11B-703.4.1 and 11B-703.4.2.) These signs must have contrasting colors. They may have an optional pictogram to indicate whether the restroom is a Men's, Women's, or Unisex restroom. (CCR, Sections 11B-703.5.1, 11B-213.2, and 11B-703.6.) See Figure 32.

Figure 32: Restroom raised letter and Braille signs.

The second set of signs are required symbols for Men's, Women's, and Unisex restrooms. The Men's restroom sign is identified by an equilateral triangle with edges 12 inches long and the apex pointing upward. The Women's restroom sign is a circle 12 inches in diameter. The Unisex sign is a circle 12 inches in diameter with a triangle placed over the circle within the 12-inch diameter. The circle and triangle must have contrasting colors. These geometric signs shall be mounted at 58 inches minimum and 60 inches maximum above the floor or ground surface measured from the centerline of the sign. The color shall contrast distinctly from the color of the background. (CCR, Section 11B-703.7.2.6.) See Figure 33.

Figure 33: Geometric signs for Men, Women and Unisex restrooms.

Inside the restroom, accessible fixtures such as paper towel dispensers, soap dispensers, or electronic hand dryers shall be on an accessible route. (CCR, Sections 11B-213.2 and 11B-206.2.4.) The minimum width of the restroom accessible route shall be 36 inches and may reduce in width to 32 inches for a length not to exceed 24 inches. (CCR, Section 11B-403.5.1 Exception 1.) All objects on the accessible route that are mounted on walls between 27 inches to 80 inches high must not protrude out from the wall more than 4 inches (CCR, Section 11B-307.2.)

An unobstructed turning space 27 inches high and at least 60 inches in diameter or a T-shaped turning space is required inside the restroom for voters who use wheelchairs. No door may swing into this space more than 12 inches except the door to the accessible toilet compartment. (CCR, Section 11B-603.2.1.) See Figure 34.

Figure 34: The inside of a restroom showing floor space measurements.

Clear spaces 30 inches by 48 inches are required in front of lavatories/sinks, dispensers, mirrors, and other fixtures with controls. (CCR, Section 11B- 309.2.) Doors shall not swing into the clear spaces required in front of these items. (CCR, Section 11B-603.2.) The accessible route, the 60-inch diameter turning space, and the clear floor spaces in front of lavatories/sinks, dispensers, mirrors, and other fixtures with controls may overlap. (CCR, Sections 11B-603.2 and 11B-213.2.)

Accessible lavatories/sinks have several clear space requirements illustrated by Figure 35 and described below.

Figure 35: Lavatory/sinks knee clearances and accessible space requirements.

Clear floor spaces are required at lavatories/sinks and shall adjoin or overlap an accessible route in the restroom. The clear floor space may extend up to 19 inches maximum into the knee space underneath the lavatory/sink. (CCR, Sections 11B-306.2.2 Exception and 11B-606.2.) This clear floor space allows a person using a wheelchair for mobility to move close enough to use the faucet controls, dispensers, or mirror.

When lavatories/sinks are located next to a sidewall or partition, a minimum 18 inches of clear space on the counter (measured from the wall to the centerline of the faucet) is required for arm movement. (CCR, Section 11B-606.6.)

The rim or counter edge of the accessible lavatory/sink shall be mounted a maximum of 34 inches from the floor. (CCR, Section 11B-606.3.)

The vertical clearance under the counter at the front edge of the lavatory/sink shall be at least 29 inches above the floor. Moving horizontally 8 inches underneath the lavatory/sink, the measurement is reduced to 27 inches above the floor. The next measurement is clear floor space measured at a point 6 inches forward from the back wall and shall be at least 9 inches high. Toe clear space shall be free of any type of obstructions, including hot water heaters, garbage cans, etc. These measurements are illustrated in Figure 35. (CCR, Section 11B-306.3.3 Exception 1.)

Faucets and other operating mechanisms shall be operable with one hand and not require tight grasping, pinching, or twisting of the wrist. The maximum effort allowed for activating faucet controls is 5 pounds of force. When hand-operated metering faucets are activated, the water shall remain on for at least 10 seconds. (CCR, Sections 11B-309 and 11B-606.4.)

To avoid injury, water pipes and drainpipes under accessible lavatories/sinks shall be insulated or arranged to prevent contact. Sharp or abrasive surfaces under lavatories/sinks shall not be allowed. (CCR, Section 11B-606.5.)

At least one of each type of restroom dispenser or other equipment provided for public use shall be located on an accessible route. At least one of each type of towel holder, sanitary napkin dispenser, waste receptacle, or other dispenser shall be installed with operable controls a maximum of 40 inches above the floor. For operable controls, the movement of the control from beginning to end shall be at or below the 40 inches maximum height and shall not require tight grasping, pinching, or twisting of the wrist. (CCR, Section 11B-603.5.)

Mirrors above lavatories/sinks or countertops shall be mounted with the bottom edge of the reflecting surface no higher than 40 inches from the floor. (CCR, Section 11B-603.3.)

The toilet paper dispenser shall be placed between 7 and 9 inches in front of the toilet when measured to the centerline of the dispenser. The outlet of the dispenser shall be 19 inches minimum above the floor and placed so the outlet is completely below the grab bar. No part of the dispenser shall be located behind the grab bar. Dispensers that control delivery or that do not permit continuous paper flow shall not be used. The entire toilet paper dispensers shall be installed below the side grab bar. (CCR, Section 11B-604.7.1.)

Toilet paper dispensers installed prior to January 1, 2014, may be placed within 12 inches of the front edge of the toilet measured to the centerline of the dispenser.

A multiple accommodation restroom provides one or more toilet stalls. At least one of these toilet stalls shall be accessible. (CCR, Section 11B-213.3.1.) The minimum width for an accessible toilet stall is 60 inches (CCR, Section 11B-604.3.1 and 11B-604.8.1.4.)

When the toilet stall has an end-opening door that faces the toilet, a minimum 60 inches wide by 48 inches deep clear floor space shall be provided in front of the toilet. (CCR, Section 11B-604.8.1.1.3.) If the stall has a side-opening door, a minimum 60 inches wide by 60 inches deep clear floor space shall be provided in front of the toilet. (CCR, Section 11B-604.8.1.1.2.) See Figure 36.

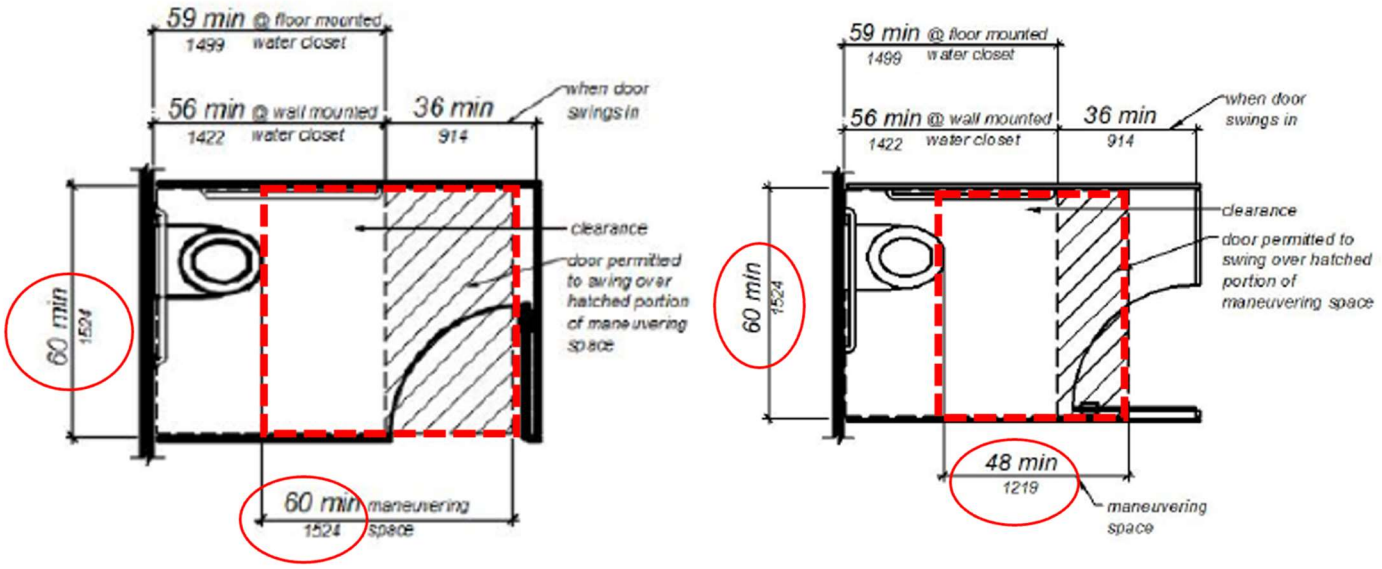

Figure 36: Diagram of maneuvering space in toilet compartments with a side-opening door and end-opening door.

When a stall door is at the end of the stall, facing the toilet, the minimum clear width of the stall door opening shall be 32 inches when measured with the door open to 90 degrees. (CCR, Section 11B-404.3.1) When a stall door is on the side of the stall, its minimum width shall be 34 inches when measured with the door open to 90 degrees. Stall doors shall be self-closing. (CCR, Section 11B-604.8.1.2 Exception.)

The latch hardware on the stall door shall be a flip-over style, sliding or similar hardware that does not require the user to grasp, pinch or twist their wrist. Accessible handles shall be placed near the latch on both the inside and outside of the stall door. (CCR, Section 11B-604.8.1.2 Exception.) See Figure 37.

Figure 37: Restroom door with an accessible handle and flip over style hardware.

Accessible toilet compartment doors shall comply with CCR, Section 11B-404 for doors, 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 minimum measured perpendicular to the compartment door in its closed position. Except for door-opening widths and door swings, a clear, accessible route not less than 44 inches wide shall be provided to accessible toilet stalls. (CCR, Section 11B-403.5.1 Exception 5.). See Figure 38.

Figure 38: Restroom clear floor space on the accessible route to the toilet stall.

Accessible compartment stalls shall be 60 inches wide minimum, measured perpendicular to the side wall, and 56 inches deep minimum for wall-hung water closets (toilets) and 59 inches deep minimum for floor-mounted water closets (toilets) measured perpendicular to the rear wall. (CCR, Section 11B-604.8.1.1.)

A minimum 60 inches wide by 48 inches deep clear floor space shall be provided in front of the toilet. No obstruction shall be permitted in the clear floor space between the edge of the toilet and the farthest wall or partition. (CCR, Sections 11B-604.3.1 and 11B-604.3.2.) The centerline of the toilet shall be 17 inches minimum to 18 inches maximum from the nearest sidewall or partition. (CCR, Section 11B-604.2.)

The height of an accessible toilet seat shall be between 17 inches and 19 inches measured from the floor to the top of the toilet seat. (CCR, Section 11B-604.4.) See Figure 36. The flush control shall be mounted no more than 44 inches above the floor and located on the open floor side of the toilet. The flush control shall require no more than 5 pounds of force to operate. (CCR, Section 11B- 604.6.)

Grab bars in the accessible toilet stall shall be provided on the sidewall closest to the toilet and on the rear wall behind the toilet. (CCR, Section 11B-604.5.) Grab bars with a circular cross section shall have an outside diameter of 1 ¼ inches to 2 inches. Grab bars with non-circular cross sections shall have a maximum cross section dimension of 2 inches and a perimeter dimension of 4 inches minimum and 4.8 inches maximum. (CCR, Section 11B-609.2.) Grab bars shall be mounted with a space of 1 ½ inches between the grab bar and the wall. (CCR, Section 11B-609.3.) Grab bars shall be securely attached and centered 33 inches minimum and 36 inches maximum above and parallel to the floor when measured to the top of the gripping surface. (CCR, Section 11B-609.4.)

Side grab bars shall be a minimum of 42 inches long, extend 54 inches minimum from the rear wall, and continue past the front edge of the toilet at least 24 inches. (CCR, Section 11B-604.5.1.)

Rear grab bars shall be a minimum of 36 inches long, extend from the centerline of the toilet 12 inches minimum toward the narrow side, and 24 inches minimum toward the wide side. (CCR, Section 11B-604.5.2.) See Figure 39. Rear grab bars are allowed to be 24 inches long, extending 12 inches on each side of the centerline of the toilet, when a recessed fixture is mounted on the rear wall adjacent to the toilet. (CCR, Section 11B-604.5.2. Exception 1.)

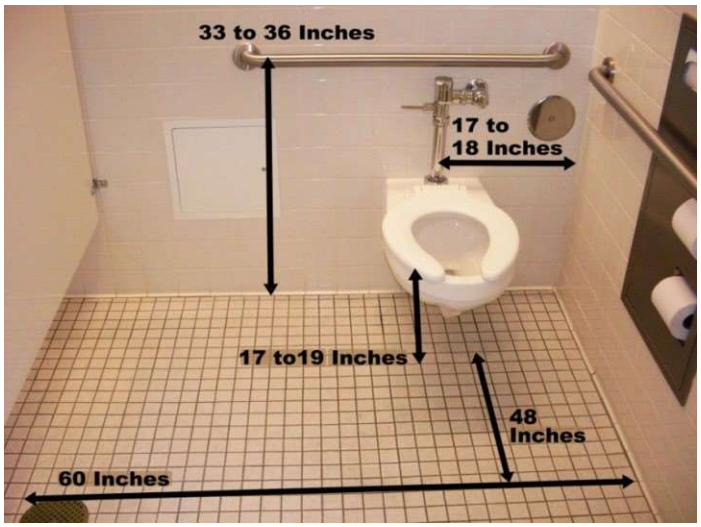

Figure 39: Clear floor space, toilet, and grab bar measurements inside a restroom stall.

Single accommodation restrooms provide at least one toilet and one lavatory/sink. The room may or may not have a partition between the toilet and the lavatory/sink. See Figure 39.

There shall be a clear floor space of at least 60 inches in diameter, or a T-shaped turning space. A door cannot encroach into this turning space by more than 12 inches. (CCR, Section 11B-603.2.3.) Grab bars shall be provided on the sidewall closest to the toilet and on the rear wall behind the toilet in the same manner as required for toilet stalls. (CCR, Section 11B-604.8.1.5.)

The centerline of the toilet shall be 17 to 18 inches from the nearest sidewall or partition. (CCR, Section 11B-604.2.) In front of the toilet there shall be a rectangle clear floor space a minimum of 60 inches wide by 48 inches deep. (CCR, Section 11B-604.3.1.) See Figure 39.

In single accommodation restrooms constructed prior to January 1, 2014, with a fixture next to the toilet, the wide side of the toilet can be as narrow as 28 inches between the toilet and a fixture. If no fixture is adjacent to the toilet the clear space on the wide side of the toilet can be as narrow as 32 inches.