

## Site Accessibility- 2012 International Building Code and 2009 ICC/ANSI A117.1

### Accessible Route of Travel

Accessible route of travel is defined as; *a continuous unobstructed path connecting all accessible elements and spaces in an accessible building or facility that can be negotiated by a person with a severe disability using a wheel chair and that is also safe and usable by persons with other disabilities.*

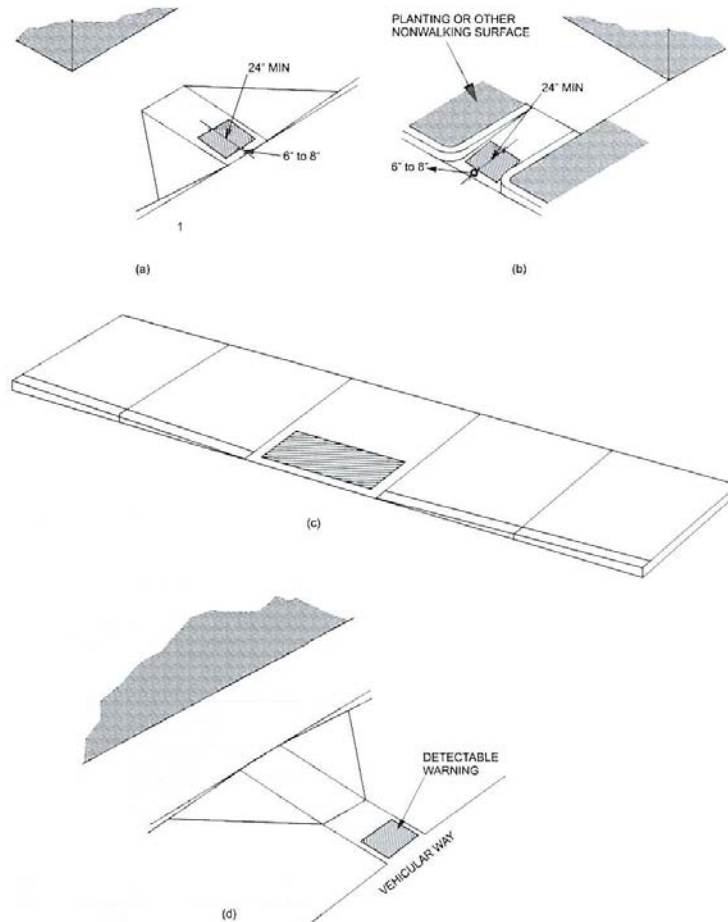
- At least one accessible route within the boundary of the site shall be provided from public transportation stops, accessible parking and accessible passenger loading zones, and public streets or sidewalks to the accessible building entrance.
- The accessible route of travel shall be the most practical direct route between accessible building entrances, accessible site entrances, accessible site facilities, and the accessible entrance to the site.
- When more than one building or facility is located on a site, accessible routes of travel shall be provided between buildings and accessible site facilities.
- When a building or portion of a building is required to be accessible or adaptable, an accessible route of travel shall be provided to all portions of the building, to accessible building entrances, and between the building and the public way.
- At least one accessible route shall connect to the following:
  1. Accessible buildings, facilities, elements, and spaces that are on the same site.
  2. Accessible building or facility entrances with all accessible spaces and elements with all accessible dwelling units with the building or facility.
- An accessible route shall connect at least one accessible entrance of each accessible dwelling unit with those exterior and interior spaces and facilities that serve the accessible dwelling unit.
- At every primary public entrance and at every major junction along or leading to an accessible route of travel, there shall be a sign displaying the International Symbol of Accessibility. Signs shall indicate the direction to accessible building entrances and facilities.
- All ground floor units in a non-elevator building must be adaptable and on an accessible route.
- Public-use and common-use areas serving adaptable dwelling units shall be accessible.

### Walks and Sidewalks

- All walks, Sidewalks, halls, corridors, aisles, and other spaces that are part of an accessible route shall provide a minimum clear width of 36 inches, except at doors.
- Abrupt changes in level along any accessible route shall not exceed ½ inch. When changes in level do occur, they shall be beveled with a slope no greater than 1-unit vertical, 2 unit's horizontal, except level changes not exceeding ¼ inch may be vertical. When changes in levels greater than ½ inch are necessary, they shall comply with the requirements for curb ramps.
- The running slope of walking surfaces shall not be steeper than 1:20. The cross slope of a walking surface shall not be steeper than 1:48.
- All walks with continuous gradients shall have level areas at least 5 feet in length at intervals of at least every 400 feet.
- Where an accessible route makes a 180 degree turn around an object that is less than 48 inches in width, clear widths shall be 42 inches minimum approaching the turn, 48 inches minimum during the turn, and 42 inches' minimum leaving the turn. *Exception: Above minimum widths need not apply where the clear width at the turn is 60 inches minimum.*
- An accessible route with a clear width less than 60 inches shall provide passing spaces at intervals of 200 feet maximum. Passing spaces shall be either a 60 inch minimum by 60-inch minimum space, or an intersection of two walking surfaces that provide a T-shaped turning space provided the base and arms of the T-shaped space extend 48 inches minimum beyond the intersection.

### Detectable Warnings

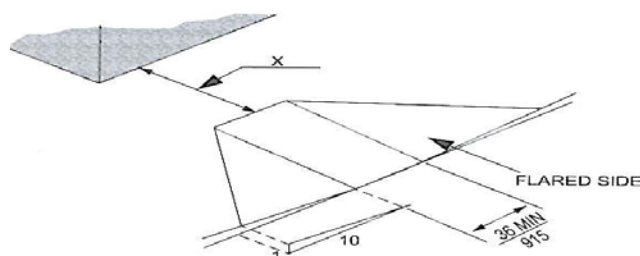
- Marked crossings that are the same level as the adjoining sidewalk shall be preceded by a 24-inch-deep detectable warning complying with ICC/ANSI A117.1 Section 705, extending the full width of the marked crossing.



## Curb Ramps

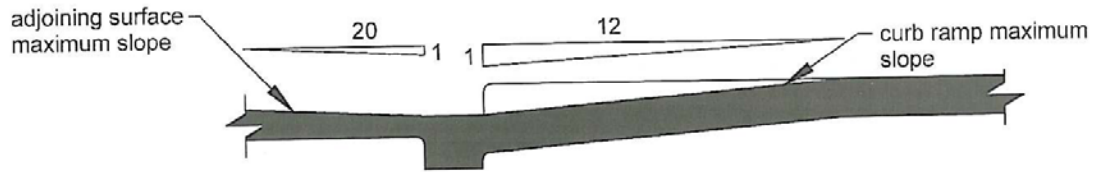
*“Curb Ramp” is defined as a sloping pedestrian way intended for pedestrian traffic which provides access between a walk or sidewalk to a surface above or below an adjacent curb face. Curb ramps shall be constructed where a pedestrian way crosses a curb. The preferred and recommended location for a curb ramp is in the center of the crosswalk or each street corner.*

- Where provided, curb ramps shall not be steeper than 1:12.
- Curb ramps shall be located or protected to prevent their obstruction by parked vehicles.
- Counter slopes of adjoining gutters and road surfaces immediately adjacent to 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.
- Curb ramps shall be a minimum of 36 inches wide, exclusive of flared sides.
- Where provided, curb ramp flares shall not be steeper than 1:10.
- Curb ramps and the flared sides of curb ramps shall be located so 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.
- Landings shall be provided at the tops of curb ramps. The clear length of the landing shall be 36 inches minimum. The clear width of the landing shall be at least as wide as the curb ramp, excluding any flared sides.
- Handrails are not required at curb ramps.

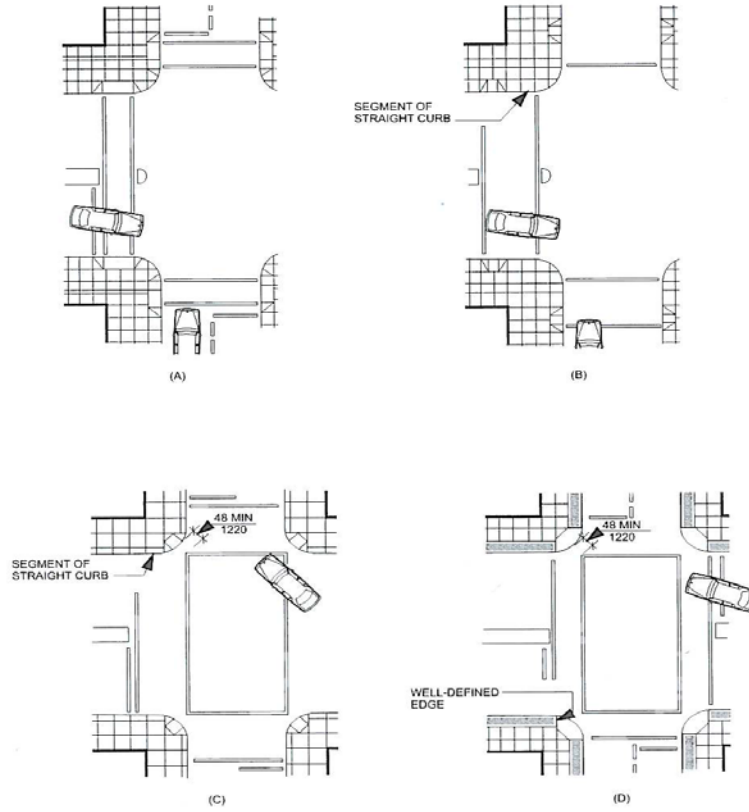


NOTE: PER SECTIONS 403.5 AND 406.7, IN NEW CONSTRUCTION X IS 36 INCHES MINIMUM. IN ALTERATIONS WHERE X < 36 INCHES, SIDES MUST BE SLOPED 1:12 MAX

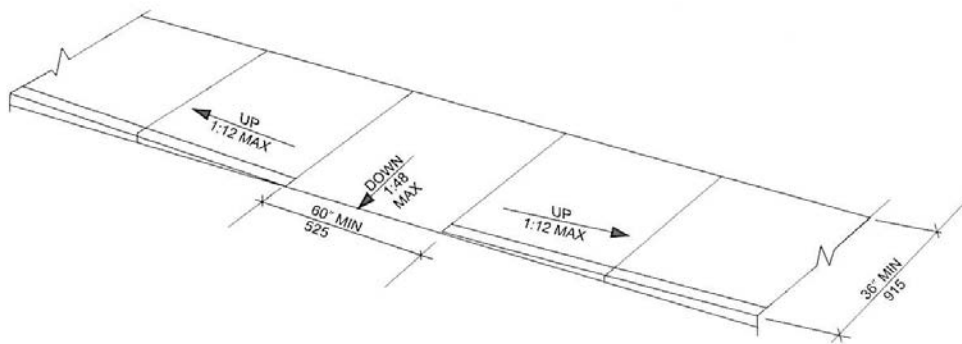
**Maximum Slopes**



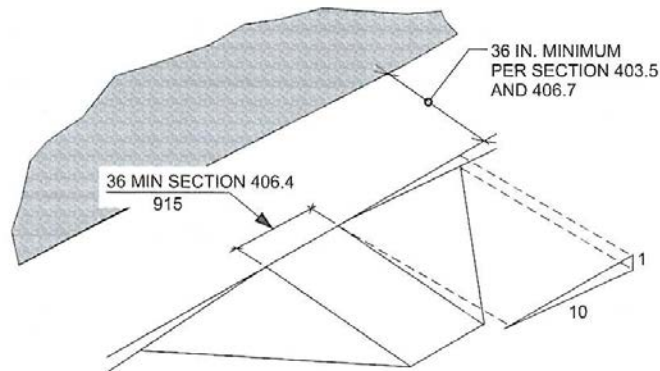
**Curb Ramps at Marked Crossings**



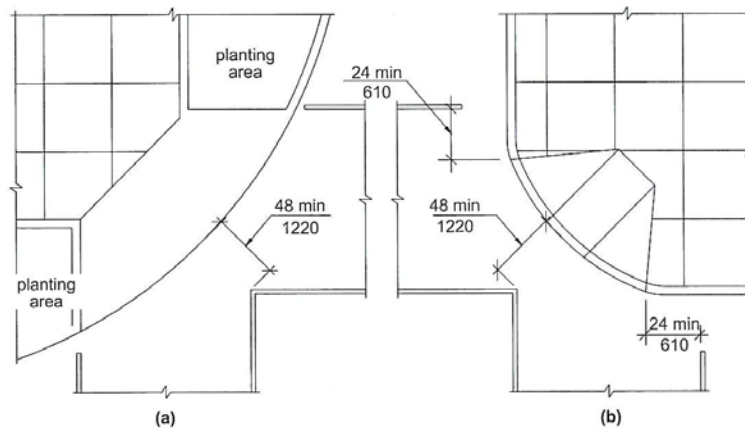
**Curb Ramp Option**



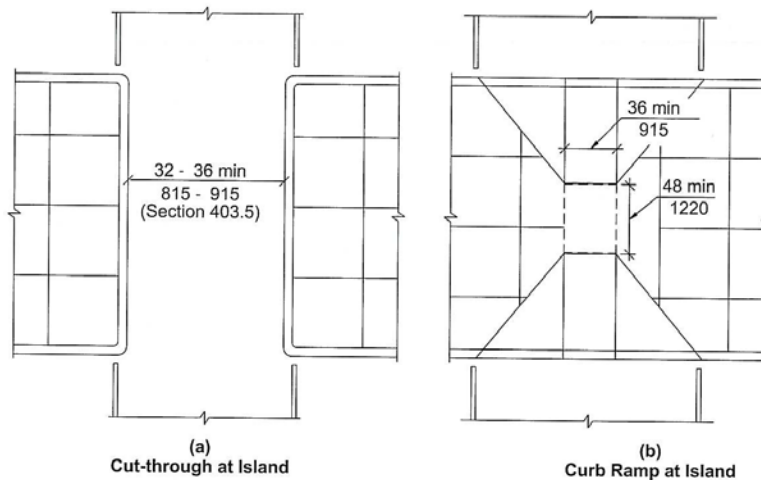
**Built-up Curb Ramps**



## Diagonal Curb Ramps



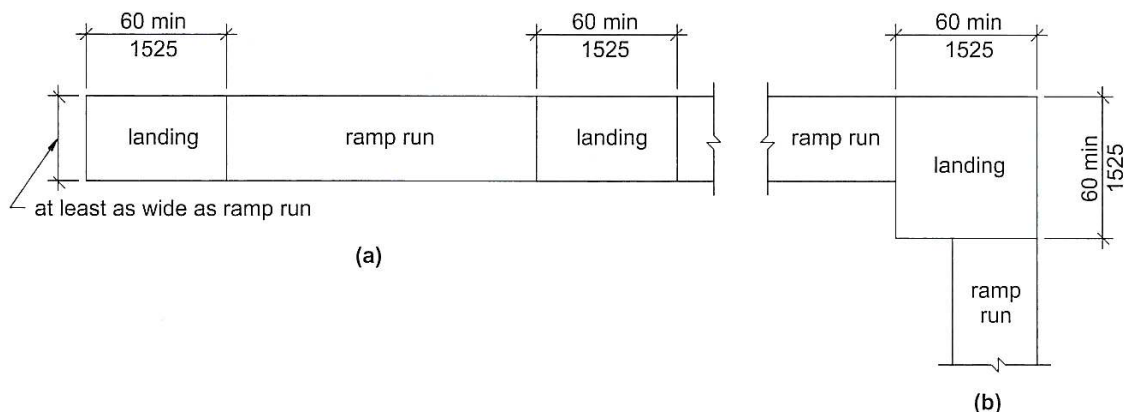
## Islands



## Ramps (Exterior or Interior)

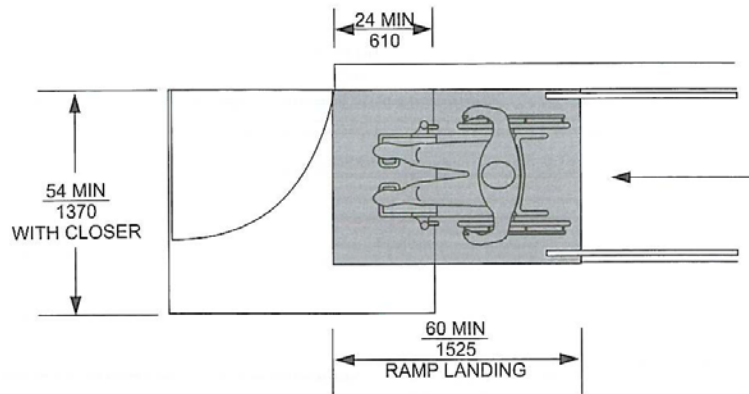
Any path of travel shall be considered a ramp if its slope is greater than 1:20 (5%). The least possible slope shall be used in any ramp.

- The maximum slope of a ramp that serves any exit way, provides access for persons with disabilities, or is in the path of travel shall be 1:12.
- The cross slope of ramp surfaces shall be no greater than 1:48.
- The width of ramps shall be as required for stairways and exits.
- Pedestrian ramps serving primary entrances to building having an occupant load of 300 or more shall have a minimum clear width of 60 inches.
- All other pedestrian ramps serving primary entrances shall be a minimum width of 48 inches.
- Landings shall be provided at the top and bottom of each ramp.
- Clear width of the landings shall be at least as wide as the widest ramp run leading to the landing.
- The width of the landing shall extend 24 inches past the strike edge of any door or gate for exterior ramps and 18 inches past the strike edge for interior ramps.

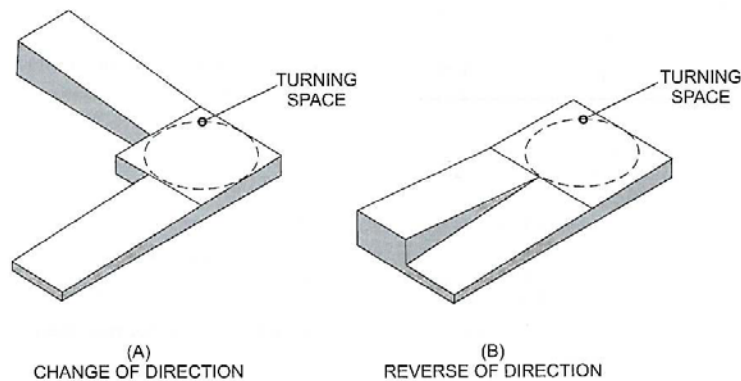


## Ramp Landings

- Landings shall have a clear length of 60 inches minimum.



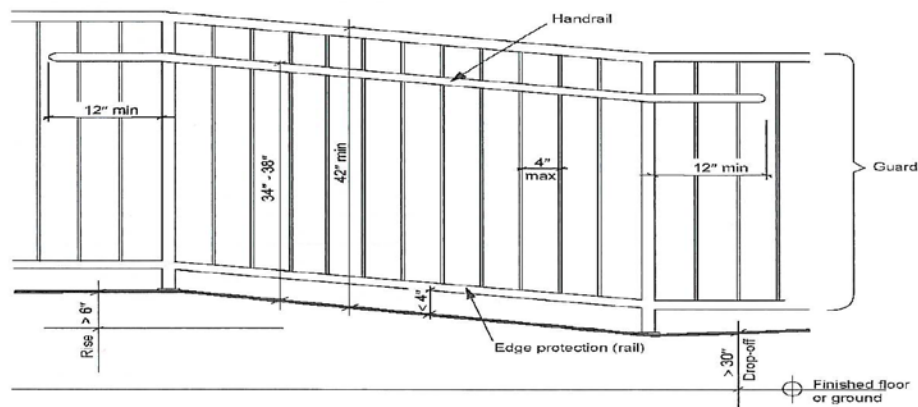
- Ramps that change direction at ramp landings shall be a minimum of 60 inches by 60 inches to provide the minimum turning radius.



- Landings shall have a slope not steeper than 1:48.
- Intermediate landings shall be provided at intervals not exceeding 30 inches of vertical rise and at each change of direction.
- Ramp runs with a rise greater than 6 inches shall have handrails.
- Ramps subject to wet conditions shall be designed to prevent the accumulation of water.

## Ramp Handrails

- Ramp runs with a rise greater than 6 inches shall have handrails complying with ICC/ANSI A117.1 Section 505.
- Handrails shall be placed on each side of each ramp, shall be continuous the full length of the ramp, shall be 34 to 38 inches above the ramp surface, shall extend a minimum of 12 inches beyond the top and bottom of the ramp, and the ends shall be returned.
- Circular handrails shall have an outside diameter of 1 ¼ inches minimum and 2 inches' maximum. Handrails shall not rotate within their fittings.
- Non Circular handrails shall have a minimum cross section dimension of 1 ¼ inches and a maximum cross section dimension of 2 ¼ inches in the graspable portion of the rail.
- Handrails and any wall or surface adjacent to handrails shall be free of sharp or abrasive elements. Edges shall have a minimum radius of ¼ inch.

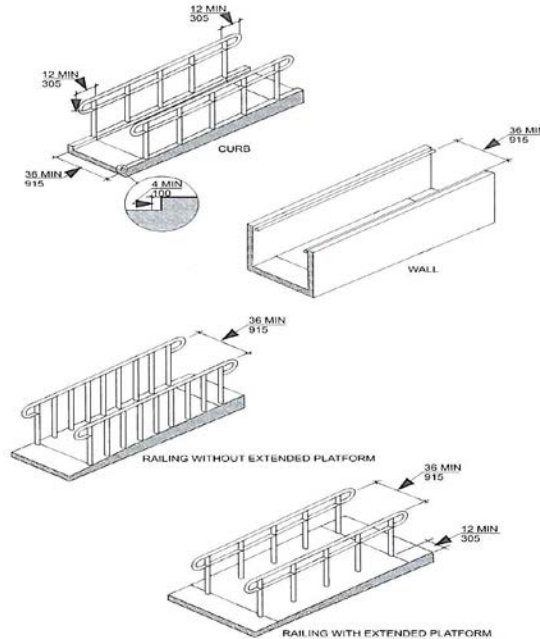


**Edge Protection/ Guide Curb**

— Edge protection shall be provided on each side of ramp runs and at each side of ramp landings.

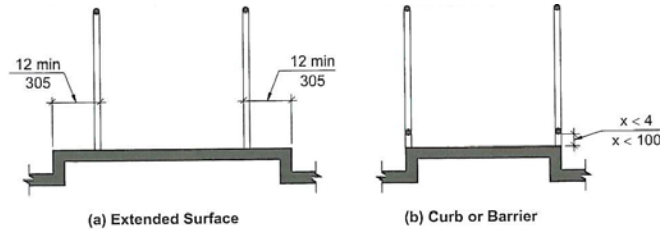
Exceptions:

1. Ramps not required to have hand rails where curb ramp flares complying with ICC/ANSI A117.1 Section 406.3 are provided.
2. Sides of ramp landings serving an adjoining room run or stairway.
3. Sides of ramp landings having a vertical drop-off of ½ inch maximum beyond the inside face of a railing complying with ICC/ANSI A117.1 Section 505.



— A guide curb a minimum of 2 inches in height shall be provided on each side of the ramp; or a wheel guide rail shall be provided centered 3 inches ± above the surface of the ramp.

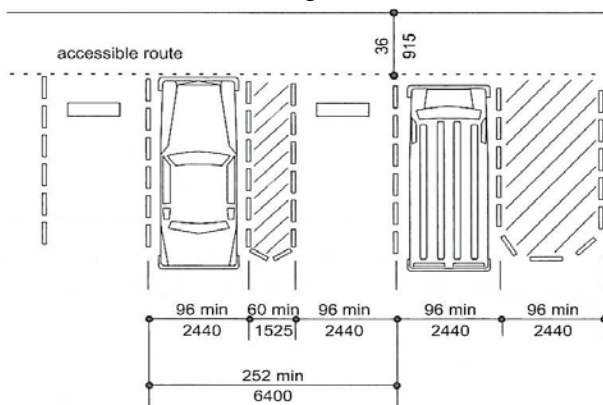
Exception: Where the floor surface of the ramp run or ramp landing extends 12 inches minimum beyond the inside face of a railing complying with ICC/ANSI A117.1 Section 505.



**Accessible Parking**

Each lot or parking structure where parking is provided for clients, guests, employees, or residents shall be accessible.

— Accessible parking spaces shall be located on the shortest possible accessible route of travel to an accessible building entrance. When Practical, the accessible route of travel shall not cross lanes for vehicular traffic. When crossing vehicular traffic lanes is necessary, the route of travel shall be designated and marked as a crosswalk.





- Parking spaces for vans, access aisles serving them, and vehicular routes from an entrance to van parking spaces, and from the van parking spaces to a vehicular exit serving them shall provide a vertical clearance of 98 inches minimum.
- A van accessible parking space shall be 16 feet wide and outlined to provide a 132-inch parking area and a 60 inch loading and unloading access aisle on the passenger side of the vehicle.
- A car accessible parking space shall be 13 feet wide and outlined to provide a minimum 96-inch parking area and a 60 inch loading and unloading access aisle on either side of the vehicle.
- When more than one accessible parking space is provided two spaces can be provided within a 24-foot-wide area lined to provide a 132-inch parking area on the left side of a 60 inch loading and unloading access aisle with a 96-inch parking space on the right side of the loading and unloading access aisle.
- The minimum length of an accessible parking space shall be 20 feet.

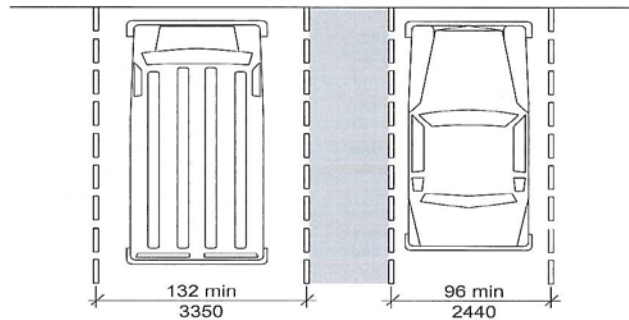
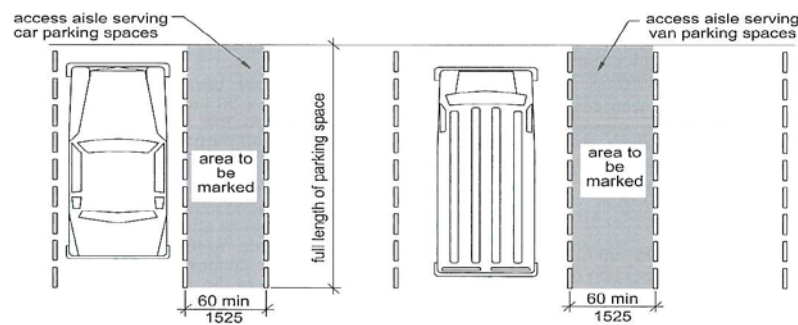
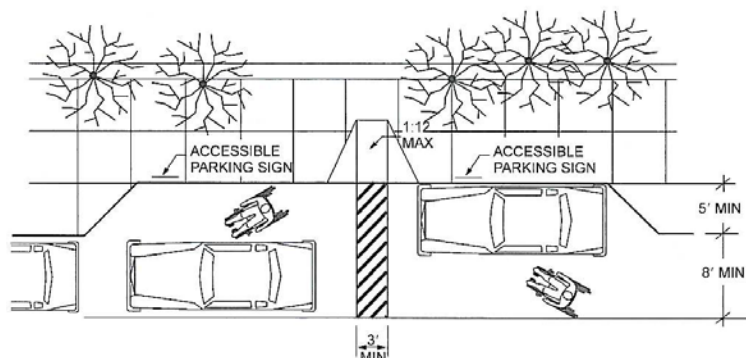


Fig. 502.2  
Vehicle Parking Space Size



- Access aisles shall be marked so as to discourage parking in them and shall be the full length of the parking space they serve.
- The minimum width of an access aisle shall be 60 inches.
- Access Aisles shall be at the same level as the parking space they serve.
- Where access aisles are marked with lines, the width measurements of access aisles and adjacent parking spaces shall be made from the centerline of the markings.
- Accessible parking spaces shall be so located that persons with disabilities are not compelled to wheel or walk behind parked cars other than their own.
- In each parking area, a bumper or curb shall be provided and located to prevent encroachment of cars over the required width of the walkways.
- Parking spaces and access aisles shall have surface slopes not steeper than 1:48 (¼ inch per foot).
- Every parking space required shall be identified by a sign, centered between 3 and 5 feet above the parking surface, at the head of the parking space. The sign shall include the international symbol of accessibility and state “Reserved” or equivalent language.



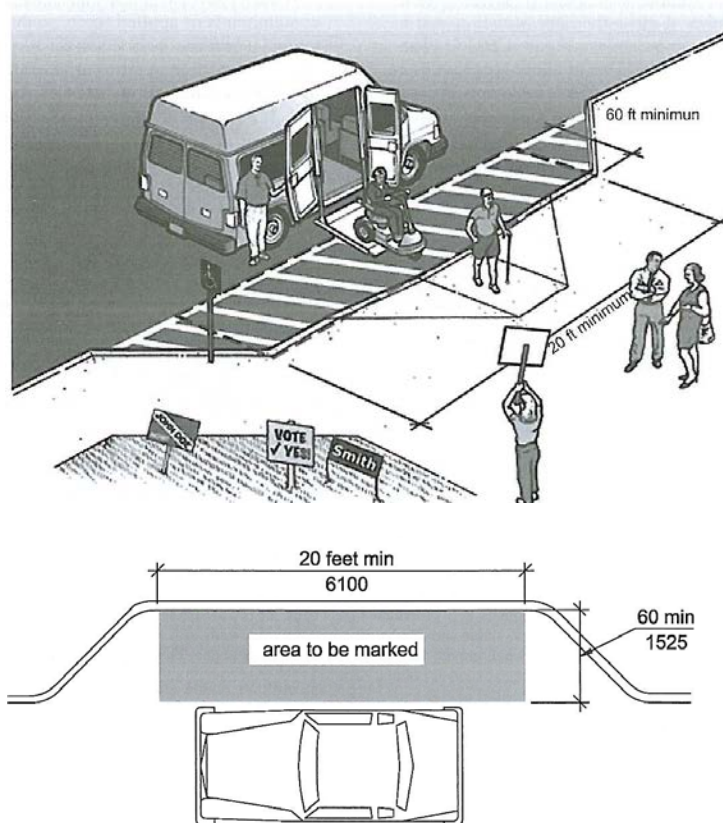


Fig. 503.3  
Passenger Loading Zone Access Aisle

## Signage

Required accessible elements shall be identified by the International Symbol of Accessibility at the following locations.

- Accessible parking spaces except where the total number of parking spaces provided is 4 or less.
- Accessible passenger loading zones.
- Accessible entrances where not all of the entrances are accessible.



Figure C502.7  
EXAMPLE OF ACCESSIBLE PARKING SPACE SIGNAGE

## Directional Signage

Directional Signage indication the route to the nearest like accessible element shall be provided in the following locations. These directional signs shall include the International Symbol of Accessibility.

- Inaccessible building entrances.
- Inaccessible public toilets and bathing facilities.
- Elevators not serving an accessible route.