

required by Section 1107 are not required to be served by an accessible route from an accessible level.

1104.5 Location. Accessible routes shall coincide with or be located in the same area as a general circulation path. Where the circulation path is interior, the accessible route shall also be interior.

Exception: Accessible routes from parking garages contained within and serving Type B dwelling units are not required to be interior.

SECTION 1105 ACCESSIBLE ENTRANCES

1105.1 Required. At least 50 percent but not less than one entrance to each building and structure, and each separate tenant space within the building or structure, shall comply with the accessible route provisions of this chapter.

Exceptions:

1. Entrances to spaces not required to be accessible as provided for in Section 1107.
2. Loading and service entrances that are not the only entrance to a building or to a tenant space.

1105.2 Multiple accessible entrances. Where a building or facility has entrances that normally serve accessible parking facilities, transportation facilities, passenger loading zones, taxi stands, public streets and sidewalks, tunnels or elevated walkways, or accessible interior vertical access, then at least one of the entrances serving each such function shall comply with the accessible route provisions of this chapter.

SECTION 1106 PARKING AND PASSENGER LOADING FACILITIES

1106.1 Required. Where parking is provided, accessible parking spaces shall be provided in compliance with Table 1106.1 except as required by Sections 1106.2 and 1106.3.

1106.2 Groups R-2 and R-3. Two percent of parking spaces provided for occupancies in Groups R-2 and R-3, which are required to have accessible dwelling units, shall be accessible. Where parking is provided within or beneath a building, accessible parking spaces shall also be provided within or beneath the building.

1106.3 Rehabilitation facilities and outpatient physical therapy facilities. Twenty percent of patient and visitor parking spaces provided at rehabilitation facilities and outpatient physical therapy facilities shall be accessible.

1106.4 Van spaces. For every eight or fraction of eight accessible parking spaces, at least one shall be a van-accessible parking space.

TABLE 1106.1
ACCESSIBLE PARKING SPACES

TOTAL PARKING SPACES PROVIDED	REQUIRED MINIMUM NUMBER OF ACCESSIBLE SPACES
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1,000	2% of total
More than 1,000	20 plus one for each 100 over 1,000

1106.5 Location. Accessible parking spaces shall be located on the shortest accessible route of travel from adjacent parking to an accessible building entrance. In parking facilities that do not serve a particular building, accessible parking spaces shall be located on the shortest route to an accessible pedestrian entrance to the parking facility. Where buildings have multiple accessible entrances with adjacent parking, accessible parking spaces shall be dispersed and located near the accessible entrances. **SIGNS - 1109.1**

Exception: In multilevel parking structures, van-accessible parking spaces are permitted on one level.

1106.6 Passenger loading zones. Passenger loading zones shall be designed and constructed in accordance with ICC/ANSI A117.1.

1106.6.1 Medical facilities. A passenger loading zone shall be provided at an accessible entrance to licensed medical and long-term care facilities where people receive physical or medical treatment or care and where the period of stay exceeds 24 hours.

1106.6.2 Valet parking. A passenger loading zone shall be provided at valet parking services.

SECTION 1107 SPECIAL OCCUPANCIES

1107.1 General. In addition to the other requirements of this chapter, the requirements of Sections 1107.2 through 1107.6.1 shall apply to specific occupancies.

Chapter 5. General Site and Building Elements

501 General

501.1 Scope. General site and building elements required to be accessible by the scoping provisions adopted by the administrative authority shall comply with the applicable provisions of this chapter.

502 Parking Spaces

502.1 General. Accessible parking spaces shall comply with Section 502.

502.2 Vehicle Spaces. Car and van parking spaces shall be 96 inches (2440 mm) wide minimum and shall have an adjacent access aisle complying with Section 502.3.

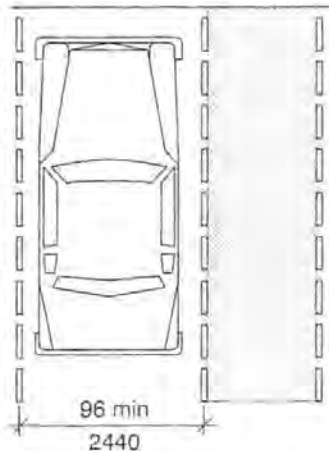


Fig. 502.2
Vehicle Parking Space

502.3 Access Aisle. Access aisles serving parking spaces shall comply with Sections 502.3.1 through 502.3.3. Parking access aisles shall be part of the accessible route to the building or facility entrance and shall comply with Section 402. Two parking spaces shall be permitted to share a common access aisle. Parked vehicle overhangs shall not reduce the clear width of an accessible route.

502.3.1 Width. Access aisles serving car parking spaces shall be 60 inches (1525 mm) wide minimum. Access aisles serving van parking spaces shall be 96 inches (2440 mm) wide minimum.

502.3.2 Length. Access aisles shall extend the full length of the parking spaces they serve.

502.3.3 Marking. Access aisles shall be marked so as to discourage parking in them.

502.4 Floor or Ground Surfaces. Parking spaces and access aisles shall have surface slopes not steeper than 1:48. Access aisles shall be at the same level as the parking spaces they serve.

502.5 Vertical Clearance. Parking spaces for vans shall have a vertical clearance of 98 inches (2490 mm) minimum at the space and along the vehicular route thereto.

502.6 Identification. Where accessible parking spaces are required to be identified by signs, the signs shall include the International Symbol of Accessibility complying with Section 703.7. Such signs shall be 60 inches (1525 mm) minimum above the floor or ground surface of the parking space, measured to the bottom of the sign.

503 Passenger Loading Zones

503.1 General. Accessible passenger loading zones shall comply with Section 503.

503.2 Vehicle Pull-up Space. Passenger loading zones shall provide an access aisle complying with Section 503.3, adjacent and parallel to a vehicle pull-up space.

503.3 Access Aisle. Access aisles serving passenger loading zones shall comply with Section 302 and Sections 503.3.1 through 503.3.3. Access aisles shall be part of the accessible route to the building or facility entrance and shall comply with Section 402.

503.3.1 Width. Access aisles serving vehicle pull-up spaces shall be 60 inches (1525 mm) wide minimum.

503.3.2 Length. Access aisles shall be 20 feet (6100 mm) long minimum.

503.3.3 Marking. Access aisles shall be marked so as to discourage parking in them.

503.4 Floor or Ground Surfaces. Vehicle pull-up spaces in passenger loading zones and access aisles shall have surface slopes not steeper than

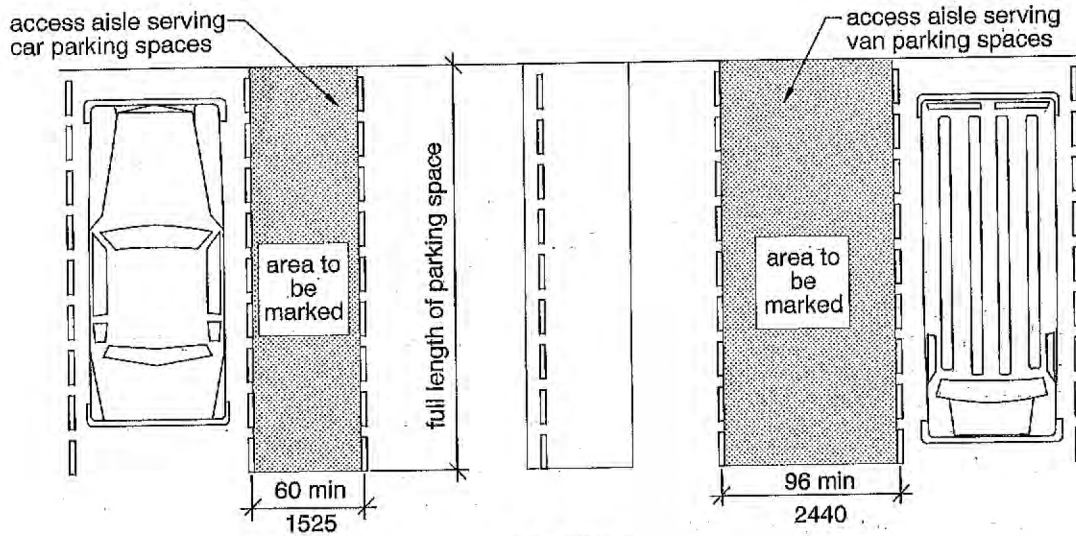


Fig. 502.3
Parking Space Access Aisle

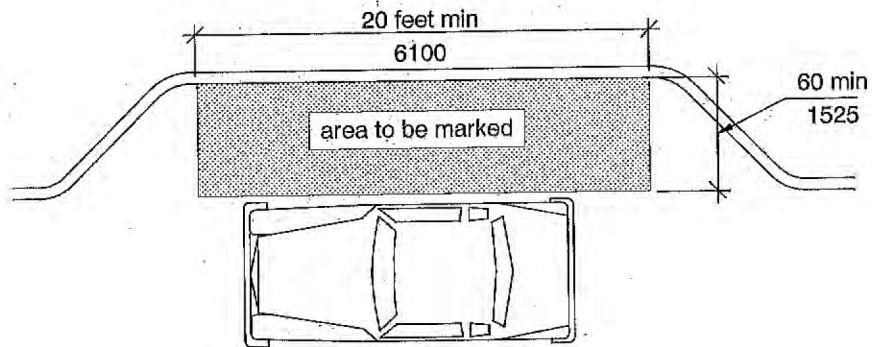


Fig. 503.3
Passenger Loading Zone Access Aisle

1:48. Access aisles shall be at the same level as the vehicle pull-up space they serve.

503.5 Vertical Clearance. Vertical clearance of 114 inches (2895 mm) minimum shall be provided at passenger loading zones and along vehicle access routes to such areas from site entrances.

504 Stairways

504.1 General. Accessible stairs shall comply with Section 504.

504.2 Treads and Risers. All steps on a flight of stairs shall have uniform riser heights and uniform tread depth. Risers shall be 4 inches (102 mm) high minimum and 7 inches (180 mm) maximum. Treads shall be 11 inches (280 mm) deep minimum, measured from riser to riser.

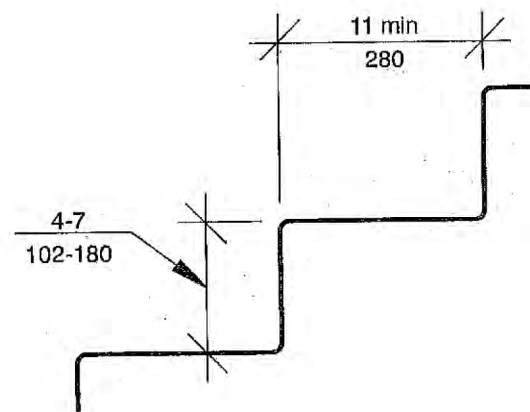


Fig. 504.2
Treads and Risers for Accessible Stairways

404.2.7 Door Hardware. Handles, pulls, latches, locks, and other operable parts on accessible doors shall have a shape that is easy to grasp with one hand and does not require tight grasping, pinching, or twisting of the wrist to operate. Such hardware shall be 34 inches (865 mm) minimum and 48 inches (1220 mm) maximum above the floor or ground. Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides.

EXCEPTION: Locks used only for security purposes and not used for normal operation are permitted in any location.

404.2.8 Closing Speed.

404.2.8.1 Door Closers. Door closers shall be adjusted so that from an open position of 90 degrees, the time required to move the door to an open position of 12 degrees shall be 5 seconds minimum.

404.2.8.2 Spring Hinges. Door spring hinges shall be adjusted so that from the open position of 70 degrees, the door shall move to the closed position in 1.5 seconds minimum, measured under ambient conditions.

404.2.9 Door-Opening Force. Fire doors shall have the minimum opening force allowable by the appropriate administrative authority. The maximum force for pushing open or pulling open doors other than fire doors shall be as follows:

1. Interior hinged door: 5.0 pounds (22.2 N)
2. Sliding or folding door: 5.0 pounds (22.2 N)

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

404.2.10 Door Surface. Door surfaces within 10 inches (255 mm) of the floor or ground measured vertically shall be a smooth surface on the push side extending the full width of the door. Parts creating horizontal or vertical joints in such surface shall be within $1/16$ inch (1.6 mm) of the same plane as the other. Cavities created by actuated kick plates shall be capped.

EXCEPTIONS:

1. Sliding doors.
2. Tempered glass doors without stiles and having a bottom rail or shoe with the top leading edge tapered at no less than

60 degrees from the horizontal shall not be required to meet the 10 inch (255 mm) bottom rail height requirement.

3. Doors which do not extend to within 10 inches (255 mm) of the floor or ground.

404.2.11 Vision Lites. Doors and sidelites adjacent to doors containing one or more glazing panels that permit viewing through the panels shall have the bottom of at least one panel 43 inches (1090 mm) maximum above the floor or ground.

404.3 Automatic Doors. Automatic doors and automatic gates shall comply with Sections 404.3.1 through 404.3.6. Full powered automatic doors shall comply with ANSI/BHMA A156.10. Low-energy and power-assisted doors shall comply with ANSI/BHMA A156.19.

404.3.1 Clear Opening Width. Doorways shall have a clear opening of 32 inches (815 mm) in power-on and power-off mode. The minimum clear width for automatic door systems shall be based on the clear opening provided by all leaves in the open position.

404.3.2 Maneuvering Clearances. Clearances at power-assisted doors shall comply with Section 404.2.4.

404.3.3 Thresholds. Thresholds and changes in level at doorways shall comply with Section 404.2.5.

404.3.4 Two Doors in Series. Doors in series shall comply with Section 404.2.6.

404.3.5 Control Switches. Control switches shall comply with Section 309.

404.3.6 Signs. Labels and warnings for automatic doors shall comply with Section 703.4.

405 Ramps

405.1 General. Walking surfaces on accessible routes with a running slope steeper than 1:20 are ramps and shall comply with Section 405.

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

EXCEPTION: Ramps in or on existing buildings or facilities shall be permitted to have slopes steeper than 1:12 complying with Table 405.2 where such slopes are necessitated by space limitations.

Table 405.2—Allowable Ramp Dimensions for Construction in Existing Sites, Buildings, and Facilities

Slope ¹	Maximum Rise
Steeper than 1:10 but not steeper than 1:8	3 inches (75 mm)
Steeper than 1:12 but not steeper than 1:10	6 inches (150 mm)

¹A slope steeper than 1:8 shall not be permitted.

405.3 Cross Slope. Cross slope of ramp runs shall not be steeper than 1:48.

405.4 Floor or Ground Surfaces. Floor or ground surfaces of ramp runs shall comply with Section 302.

405.5 Clear Width. The clear width of a ramp run shall be 36 inches (915 mm) minimum.

405.6 Rise. The rise for any ramp run shall be 30 inches (760 mm) maximum.

405.7 Landings. Ramps shall have landings at bottom and top of each run. Landings shall comply with Sections 405.7.1 through 405.7.5.

405.7.1 Slope. Landings shall have a slope not steeper than 1:48 and shall comply with Section 302.

405.7.2 Width. Clear width of landings shall be at least as wide as the widest ramp run leading to the landing.

405.7.3 Length. Landing length shall be 60 inches (1525 mm) minimum clear.

405.7.4 Change in Direction. Ramps that change direction at landings shall have a 60 inch (1525 mm) minimum by 60 inch (1525 mm) minimum landing.

405.7.5 Doorways. Where doorways are adjacent to a ramp landing, maneuvering clearances required by Sections 404.2.4 and 404.3.2 shall be permitted to overlap the landing area.

405.8 Handrails. Ramps with a rise greater than 6 inches (150 mm) shall have handrails complying with Section 505. Handrails shall not reduce the required clearances of a ramp run or landing.

405.9 Edge Protection. Edge protection complying with Section 405.9.1 or 405.9.2 shall be provided on each side of ramp runs and at each side of ramp landings.

EXCEPTIONS:

1. Ramps not required to have handrails where sides complying with Section 406.4 are provided.
2. Sides of ramp landings serving an adjoining ramp run or stairway.
3. Sides of ramp landings having a vertical drop-off of $1/2$ inch (13 mm) maximum within 10 inches (255 mm) horizontally of the minimum landing area.

405.9.1 Extended Floor or Ground Surface. The floor or ground surface of the ramp run or landing shall extend 12 inches (305 mm) minimum beyond the inside face of a railing complying with Section 505.

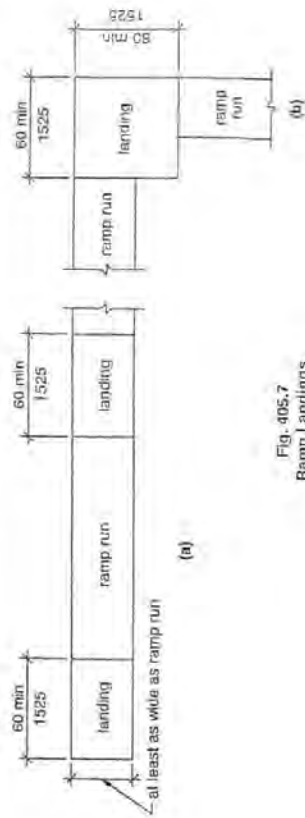


Fig. 405.7
Ramp Landings

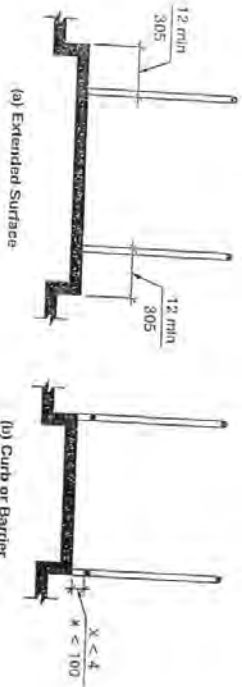


Fig. 405.9
Ramp Edge Protection

405.9.2 Curb or Barrier. A curb or barrier shall be provided that prevents the passage of a 4-inch (100 mm) diameter sphere below a height of 4 inches (100 mm).

405.10 Outdoor Conditions. Outdoor ramps and approaches to ramps shall be designed so that water will not accumulate on walking surfaces.

406 Curb Ramps

406.1 General. Curb ramps on accessible routes shall comply with Section 406.

406.2 Slope. Slopes of curb ramps shall comply with Section 405.2.

406.3 Counter Slope. Counter slopes of adjoining gutters and road surfaces immediately adjacent to the curb ramp or accessible route shall not be steeper than 1:20. Transitions from ramps to walks, gutters or streets shall be at the same level.

406.4 Sides of Curb Ramps. Where pedestrians must walk across a curb ramp, the ramp shall have flared sides. Slope of flares shall not be steeper than 1:10. Where the width of the walking surface at the top of the ramp and parallel to the run of the ramp is less than 48 inches (1220 mm) wide, the flared

sides shall have a slope not steeper than 1:12. Curb ramps with returned curbs shall be permitted where pedestrians would not normally walk across the ramp.

406.5 Width. Curb ramps shall be 36 inches (915 mm) wide minimum, exclusive of flared sides.

406.6 Floor or Ground Surface. Floor or ground surfaces of curb ramps shall comply with Section 302.

406.7 Location. Curb ramps and their side flares shall not protrude into vehicular traffic lanes, parking spaces, or into parking space access aisles.

406.8 Obstructions. Curb ramps shall be located or protected to prevent their obstruction by parked vehicles.

406.9 Handrails. Handrails are not required on curb ramps.

406.10 Location at Marked Crossings. Curb ramps at marked crossings shall be wholly contained within the markings, excluding any flared sides.

406.11 Diagonal Curb Ramps. Diagonal or corner-type curb ramps with returned curbs or other

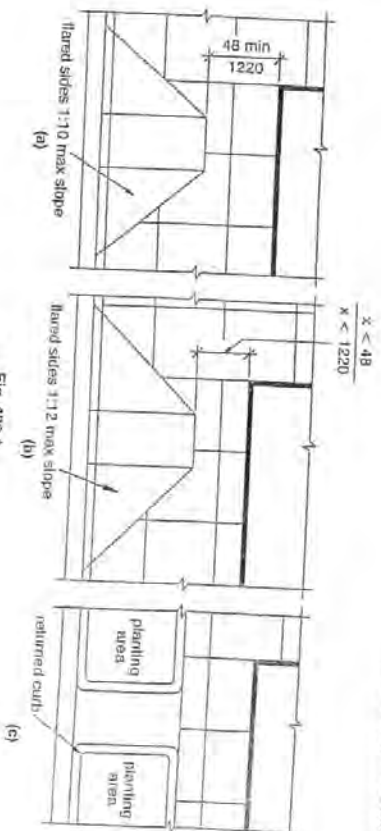


Fig. 406.4
Sides of Curb Ramps

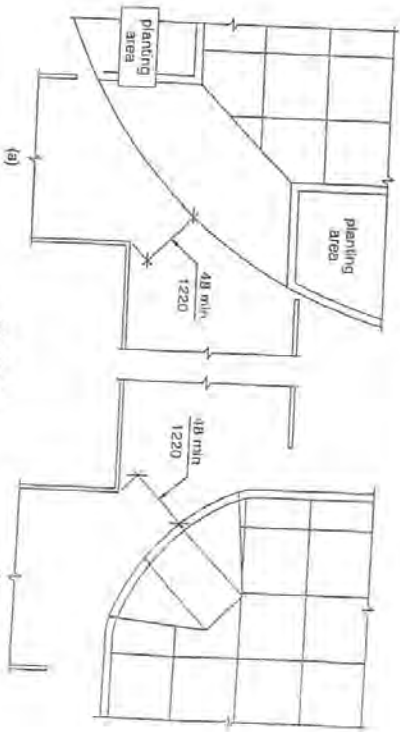


Fig. 406.11
Diagonal Curb Ramps

well-defined edges shall have the edges parallel to the direction of pedestrian flow. Bottoms of diagonal curb ramps shall have 48 inches (1220 mm) minimum clear space, measured parallel to the running slope. Diagonal curb ramps provided at marked crossings shall provide the minimum clear space within the markings. Diagonal curb ramps with flared sides shall have a segment of straight curb the curb ramp and within the marked crossing.

406.12 Islands. Raised islands in crossings shall be out through level with the street or have curb

ramps at both sides, and a level area 48 inches (1220 mm) long minimum by 36 inches (915 mm) wide minimum, in the part of the island intersected by the crossing.

407 Elevators

407.1 General. Elevators required to be accessible shall comply with Section 407.2. Destination-oriented elevators required to be accessible shall comply with Section 407.3. Limited use/lifted application elevators required to be accessible shall

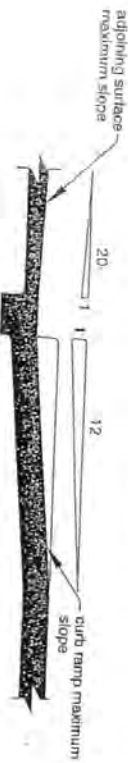


Fig. 406.3
Counter Slope of Surfaces Adjacent to Curb Ramps

505.6 Gripping Surface. Gripping surfaces shall be continuous, without interruption by newel posts, other construction elements, or obstructions.

EXCEPTION: Handrail brackets or balusters attached to the bottom surface of the handrail shall not be considered obstructions provided they comply with the following criteria:

- 1) not more than 20 percent of the handrail length is obstructed,
- 2) horizontal projections beyond the sides of the handrail occur 2 1/2 inches (64 mm) minimum below the bottom of the handrail, and
- 3) edges have a 1/16 inch (3.2 mm) minimum radius.

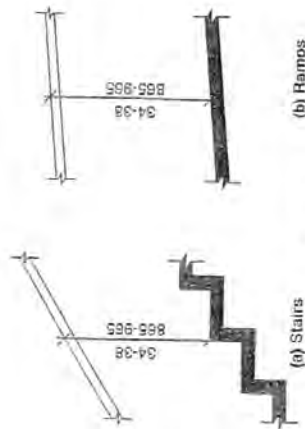


Fig. 505.4 Handrail Height



Fig. 505.5 Handrail Clearance

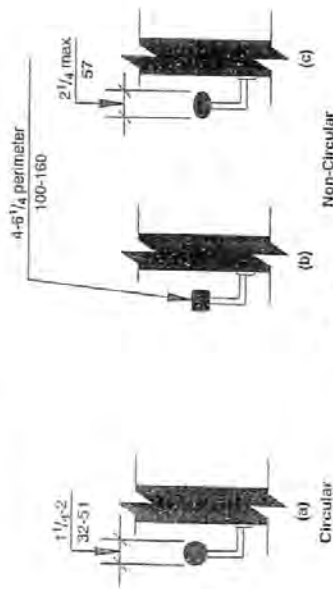


Fig. 505.7 Handrail Cross Section

or abrasive elements. Edges shall have 1/16 inch (3.2 mm) minimum radius.

505.9 Fittings. Handrails shall not rotate within their fittings.

505.10 Handrail Extensions. Handrails for stairs and ramps shall have extensions complying with Sections 505.10.1 through 505.10.3.

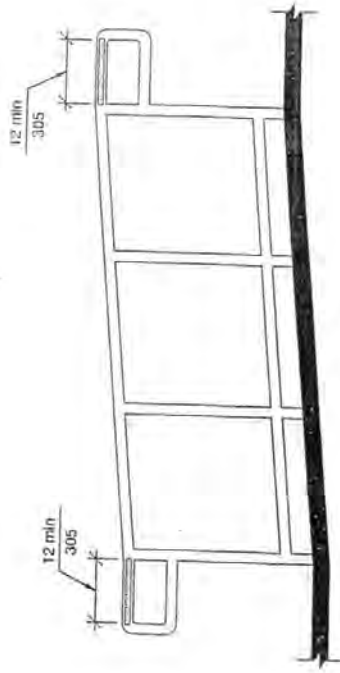


Fig. 505.10.1 Top and Bottom Handrail Extensions at Ramps

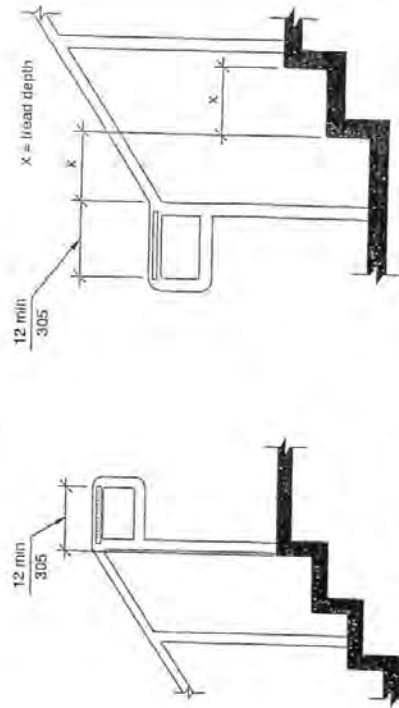


Fig. 505.10.2 Top Handrail Extensions at Stairs

Fig. 505.10.3 Bottom Handrail Extensions at Stairs

EXCEPTIONS:
1. Continuous handrails at the inside turn of stairs and ramps.

2. Extensions are not required for handrails in aisles serving seating where the handrails are discontinuous to provide access to seating and to permit crossovers within the aisle.

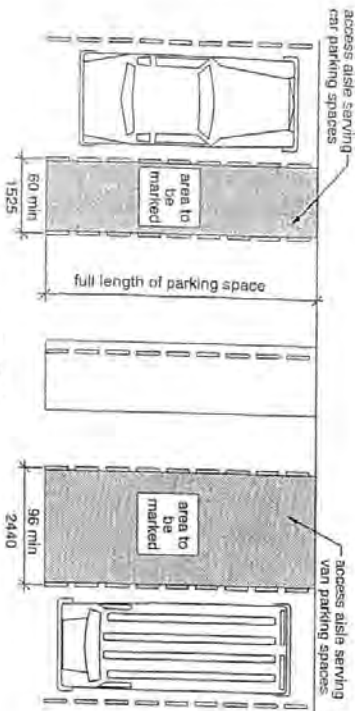


Fig. 502.3
Parking Space Access Aisle

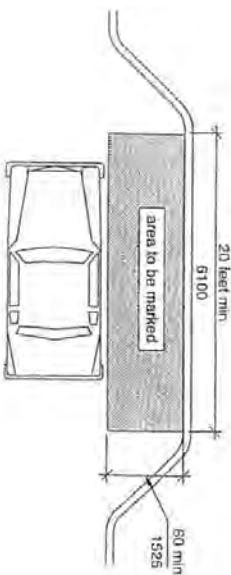


Fig. 503.3
Passenger Loading Zone Access Aisle

1-4.8. Access aisles shall be at the same level as the vehicle pull-up space they serve.

503.5 Vertical Clearance. Vertical clearance of 114 inches (2895 mm) minimum shall be provided at passenger loading zones and along vehicle access routes to such areas from site entrances.

504 Stairways

504.1 General. Accessible stairs shall comply with Section 504.

504.2 Treads and Risers. All steps on a flight of stairs shall have uniform riser heights and uniform tread depth. Risers shall be 4 inches (100 mm) high minimum and 7 inches (180 mm) maximum. Treads shall be 11 inches (280 mm) deep minimum, measured from riser to riser.

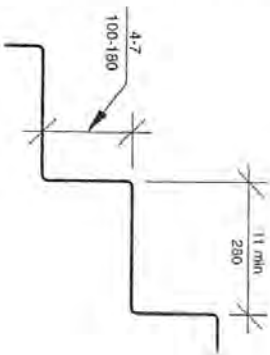


Fig. 504.2
Treads and Risers for Accessible Stairways

504.3 Open Risers. Open risers shall not be permitted.

504.4 Tread Surface. Stair treads shall comply with Section 302.

504.5 Nosings. The radius of curvature at the leading edge of the tread shall be 1/2 inch (13 mm) maximum. Nosings that project beyond risers shall have the underside of the leading edge curved or beveled. Risers shall be permitted to slope under the tread at an angle of 30 degrees maximum from vertical. The permitted projection of the nosing shall be 1 1/2 inches (38 mm) maximum beyond the tread below.

504.6 Handrails. Stairs shall have handrails complying with Section 505.

504.7 Outdoor Conditions. Outdoor stairs and outdoor approaches to stairs shall be designed so that water will not accumulate on walking surfaces.

505 Handrails

505.1 General. Handrails required by Section 405 for ramps or Section 504 for stairs shall comply with Section 505.

505.2 Location. Handrails shall be provided on both sides of stairs and ramps.

EXCEPTION: Aisle stairs and aisle ramps provided with a handrail either at the side or within the aisle width.

505.3 Continuity. Handrails shall be continuous within the full length of each stair flight or ramp run, inside handrails on switchback or docking stairs or ramps shall be continuous between flights or runs. Other handrails shall comply with Sections 505.10 and 307.

EXCEPTION: Handrails in aisles serving seating.

505.4 Height. Top of gripping surfaces of handrails shall be 34 inches (865 mm) minimum and 38 inches (965 mm) maximum vertically above stair nosings and ramp surfaces. Handrails shall be at a consistent height above stair nosings and ramp surfaces.

505.5 Clearance. Clear space between handrail and wall shall be 1 1/2 inches (30 mm) minimum.

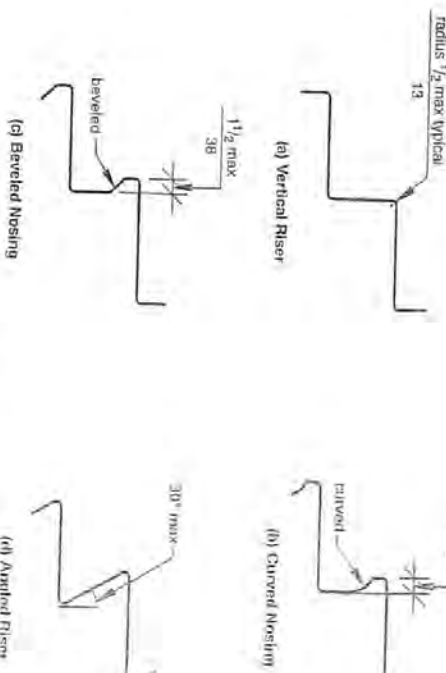


Fig. 504.5
Stair Nosings