# 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 $(6100 \mathrm{~mm})$ 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 ( 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 $1 \frac{1}{2}$ 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.

(a) Vertical Riser

(c) Beveled Nosing
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 dogleg 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 $1^{11 / 2}$ inches ( 38 mm ) minimum.

(b) Curved Nosing

(d) Angled Riser

Fig. 504.5
Stair Nosings
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 $1 / 8$ inch ( 3.2 mm ) minimum radius.
505.7 Cross Section. Handrails shall have a circular cross section with an outside diameter of $1 \frac{1}{4}$ inch ( 32 mm ) minimum and 2 inches ( 51 mm ) maximum, or shall provide equivalent graspability complying with Section 505.7.1.
505.7.1 Non-Circular Cross Sections. Handrails with other shapes shall be permitted provided they have a perimeter dimension of 4 inches ( 100 mm ) minimum and $61 / 4$ inches $(160 \mathrm{~mm})$ maximum, and provided their largest cross-section dimension is $2^{1 / 4}$ inches ( 57 mm ) maximum.
505.8 Surfaces. Handrails, and any wall or other surfaces adjacent to them, shall be free of any sharp


Fig. 505.4
Handrail Height


Fig. 505.5
Handrail Clearance


Fig. 505.7
Handrail Cross Section
or abrasive elements. Edges shall have $1 / 8$ inch $(3.2 \mathrm{~mm})$ 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.

## 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. 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
505.10.1 Top and Bottom Extension at Ramps. Ramp handrails shall extend horizontally 12 inches ( 305 mm ) minimum beyond the top and bottom of ramp runs. Such extension shall return to a wall, guard, or the walking surface, or shall be continuous to the handrail of an adjacent ramp run.
505.10.2 Top Extension at Stairs. At the top of a stair flight, handrails shall extend horizontally above the landing for 12 inches ( 305 mm ) minimum beginning directly above the first riser nosing. Such extension shall return to a wall, guard, or the walking surface, or shall be continuous to the handrail of an adjacent stair flight.
505.10.3 Bottom Extension at Stairs. At the bottom of a stair flight, handrails shall extend at the slope of the stair flight for a horizontal distance equal to one tread depth beyond the last riser nosing. Such extension shall continue with a horizontal extension or shall be continuous to the handrail of an adjacent stair flight or shall return to a wall, guard, or the walking surface. If provided at the bottom of a stair flight, a horizontal extension of a handrail shall be 12 inches ( 305 mm ) long minimum and a height equal to that of the sloping portion of the handrail as measured above the stair nosings. Such extension shall return to a wall, guard, or the walking
surface, or shall be continuous to the handrail of an adjacent stair flight.

## 506 Windows

Accessible windows shall have operable parts complying with Section 309.

## 507 Bus Stop Pads

507.1 General. Where a bus stop pad is provided at bus stops, bays, or other areas where a lift or ramp is to be deployed, it shall comply with Section 507.
507.2 Surface. The pad shall have a firm, stable surface.
507.3 Size. The minimum clear length shall be 96 inches ( 2440 mm ), measured perpendicular from the curb or edge of the vehicle roadway. The minimum clear width shall be 60 inches ( 1525 mm ), measured parallel to the curb or edge of the vehicle roadway.
507.4 Slope. The slope of the pad parallel to the roadway shall be the same as the roadway. The slope of the pad perpendicular to the roadway shall not be steeper than 1:48.
507.5 Location. Pads shall adjoin an accessible route complying with Sections 307 and 402.

