

Using the ADA and ABA Standards Series: Chapter 5: General Site and Building Elements

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Access Board Presenters



Scott Windley
Accessibility Specialist



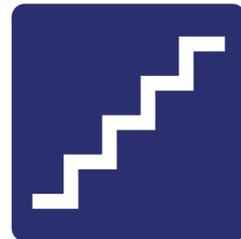
Josh Schorr
Accessibility Specialist

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Agenda

- **Parking Spaces**
- **Passenger Loading Zones**
- **Stairways**
- **Handrails**
- **Common Confusion**
- **Questions**



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Parking Spaces

Scoping Requirements (§208)

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New Construction

Access Required

- **Parking is not required to be provided**
- **Where parking is provided, it must include accessible parking spaces**
- **Excludes commercial vehicle storage, law enforcement vehicles, or vehicle impound parking**

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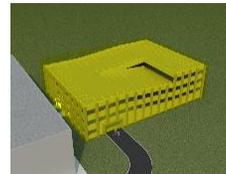
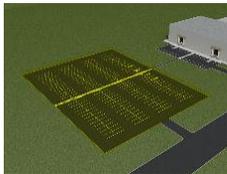
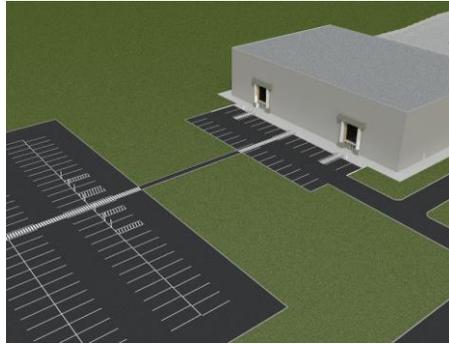
Accessible Parking Scoping

- **Applies to both public/ customer parking and employee parking**
- **Calculated on a facility-by-facility basis**
- **A “parking facility” can be a parking lot, a parking floor within a building, or a stand-alone parking structure**

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Accessible Parking Scoping



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Accessible Parking Scoping

Minimum Number of Accessible Spaces

Parking Facility Total	Standard	Van*	Total (Standard + Van)
1 - 25	0	1	1
26 - 50	1	1	2
51 - 75	2	1	3
76 - 100	3	1	4
101 - 150	4	1	5
151 - 200	5	1	6
201 - 300	5	2	7
301 - 400	6	2	8
401 - 500	7	2	9
501 - 1000	[Total - van]	*	2 percent of total
1001 - and over	[Total - van]	*	20, plus 1 for each 100, or fraction thereof, over 1000

* at least 1 of every 6 accessible spaces or fraction of 6

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Accessible Parking Scoping

Van Accessible Spaces

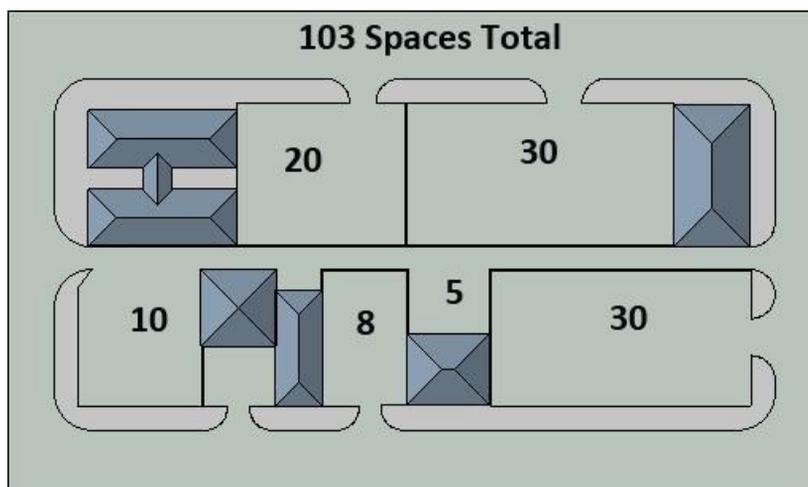
- **1 van space for every 6 accessible spaces required**
- **There will always be at least one van space required**

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Accessible Parking Scoping

Scoping Example

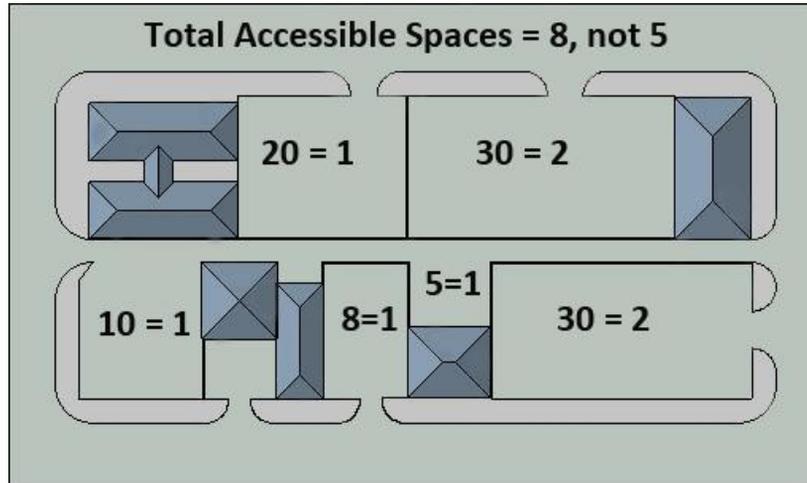


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Accessible Parking Scoping

Scoping Example



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Accessible Parking Scoping

Medical Facilities

- **Outpatient Facilities in Hospitals: 10% of spaces**
- **Rehabilitation & Outpatient Physical Therapy Facilities: 20%**
- **Doctor's Offices, Clinics, and other medical facilities: use table**
- **Multiple use facilities: 10% or 20% scoping can be applied only to the portion of visitor/patient spaces serving areas subject to the higher scoping**

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Accessible Parking Scoping

Residential Facilities

- **Resident Parking: at least 1 space for each mobility accessible dwelling unit (where each dwelling unit has its own space)**
- **Additional Resident Parking (where parking exceeds a 1 to 1 ratio): 2% of additional parking**
- **Non-Resident Parking: use table**

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Accessible Parking Scoping

Location of Parking Space

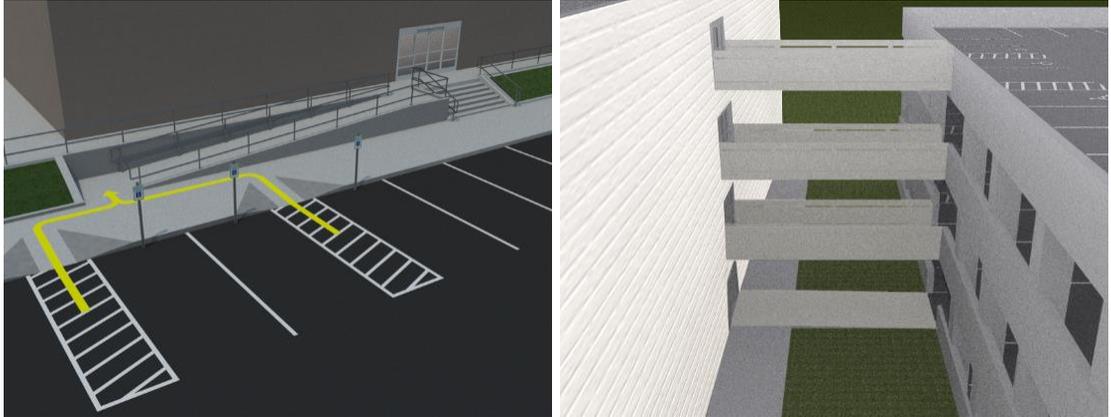
- **On shortest accessible route to accessible entrance**
- **On shortest accessible route to entrance to parking facility**
- **Dispersed to multiple accessible entrances**

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Accessible Parking Scoping

Location of Parking Space



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Accessible Parking Scoping

Location of Parking Space

- **Exception for vans in multi-level parking structures**
- **Exception allows placement in a different location if “substantially greater or equivalent accessibility is provided”**

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Accessible Parking Scoping

Location of Parking Space

Residential facilities:

- **Spaces must be provided on shortest accessible route to the dwelling unit they serve**
- **Required to be dispersed through all types of parking provided to residents (lots, carports, etc.)**

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Parking Alterations

Standards apply based on:

- **Planned scope of work**
- **Technical infeasibility**
- **Primary function areas/path of travel**

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Parking Alterations

“*Technical Infeasibility*” = Existing physical/site constraints that prohibit compliance

***Example:* removing parking space to create van access aisle conflicting with minimum zoning requirements**

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Parking Alterations



Where renovation is more extensive, technical infeasibility is less likely

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Parking Alterations

Technical Infeasibility

- **Determined case-by-case**
- **Based on existing constraints/conditions and scope of work**
- **Compliance required to the maximum extent feasible**

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Parking Spaces

Technical Requirements (§502)

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Vehicle Space

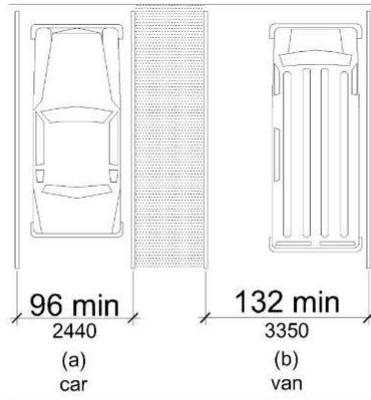


Figure 502.2
Vehicle Parking Space

Measurement taken to Center Line of marked lines

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Access Aisle

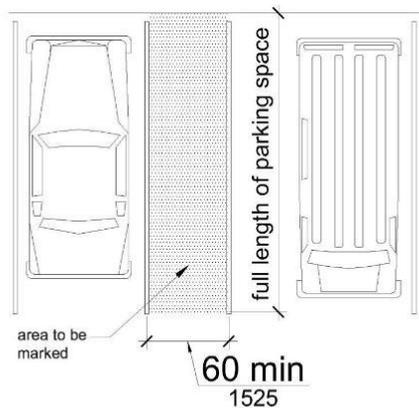


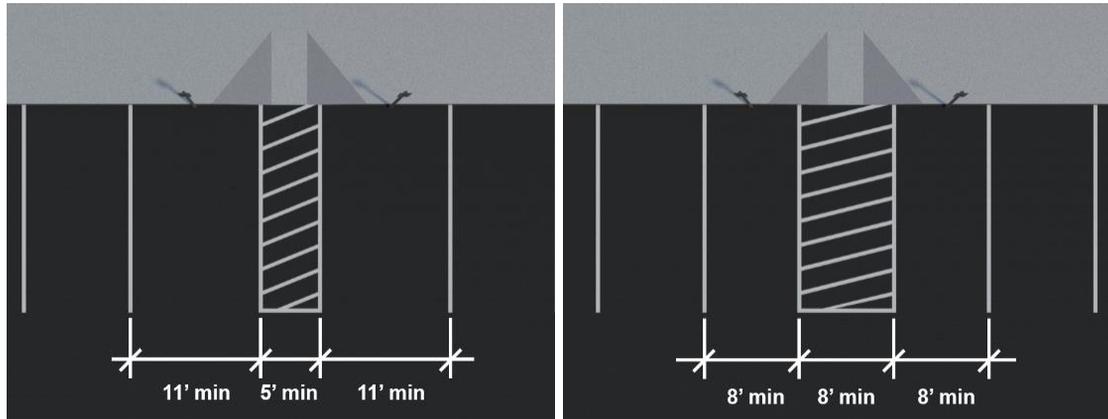
Figure 502.3
Parking Space Access Aisle

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Access Aisle

Van Access Aisle



Van parking spaces shall be permitted to be 96 inches wide minimum where the access aisle is 96 inches wide minimum.

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Access Aisle Markings

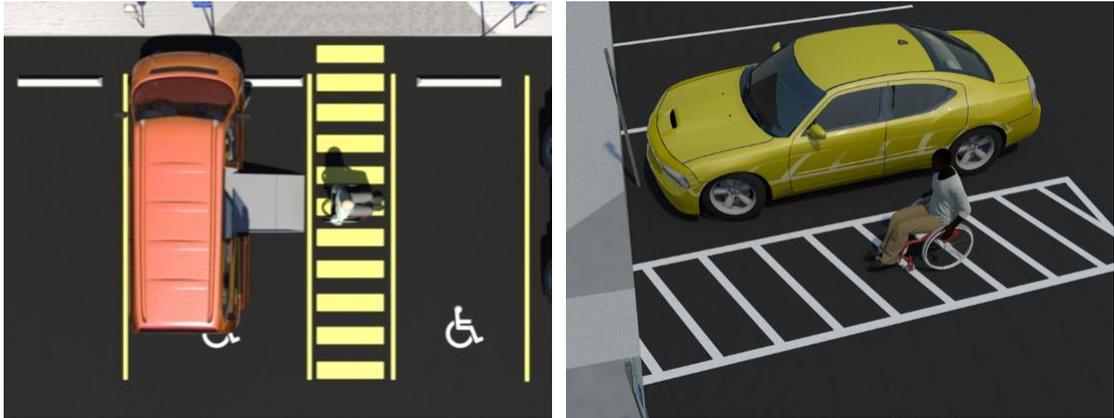
Guidelines Require

- “marked so as to discourage parking in them”
- Standards do not specify the type of marking
- Specific requirements may be a function of local code for regulating parking

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Access Aisle Markings



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Access Aisle

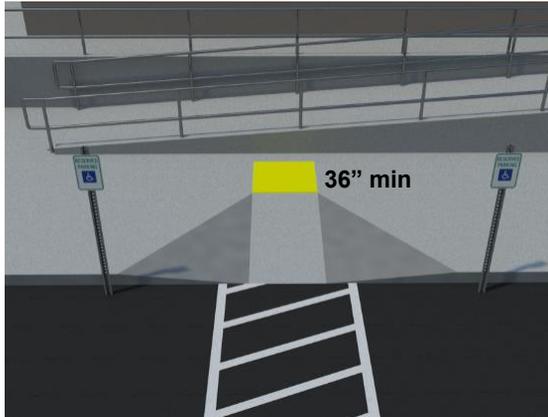
- **Cannot overlap vehicle way**
- **Can be shared by two vehicle spaces**
- **Can be on either side of vehicle space except where angled parking is provided - requiring the aisle to be located on the passenger side of van spaces**

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Access Aisle

Curb Ramp Clearance



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Van Access Aisle

Recommendation:
Provide access aisle
for vans on the
passenger side so that
drivers do not have to
back into the space



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Vertical Clearance for Vans



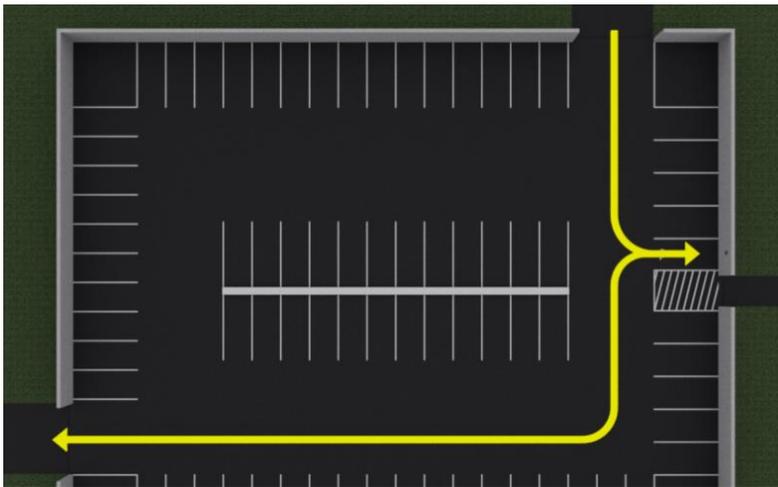
Vans requires at least 98" of vertical clearance

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Vertical Clearance for Vans

Minimum clearance applies to vehicular route from entrances to van spaces



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Vehicle Overhang



Vehicle overhang cannot reduce minimum width of accessible route

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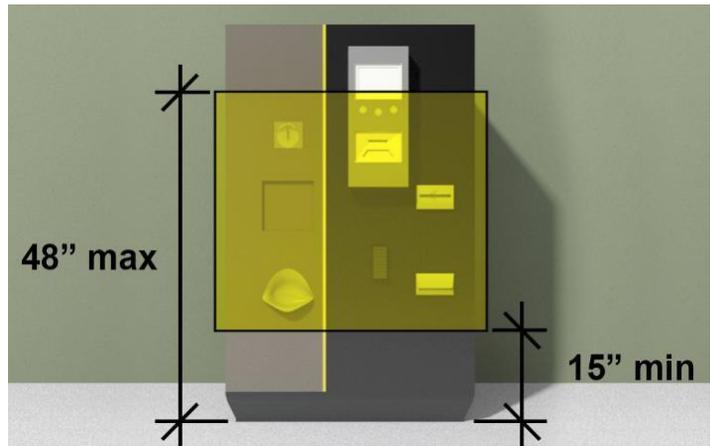
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Parking Meters and Pay Stations

Forward or Side Approach



Operable Parts



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Parking Space Signs

- **International Symbol of Access** required to designate and reserve accessible spaces
- **60 inches minimum** to bottom of sign
- **“Van Accessible”** added for van spaces
- **Exception:** sign not required where 4 or fewer spaces are provided on a site

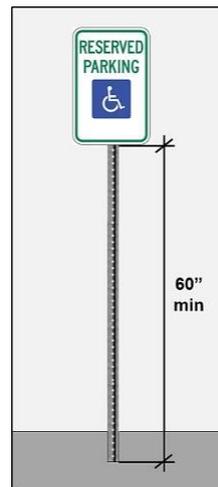
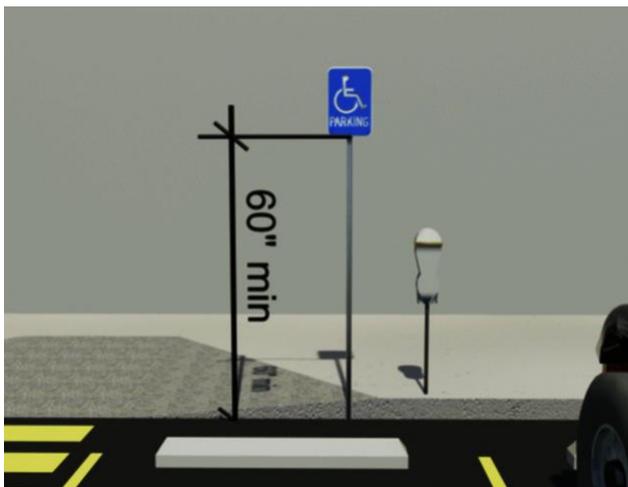


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Parking Space Signs

Sign Height



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Parking Space Signs

Sign Height



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Passenger Loading Zones

Scoping Requirements (§209)

Technical Requirements (§503)

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Passenger Loading Zones

Scoping

- **At least one entrance to medical care & long-term care facilities**
- **Valet parking facilities**
- **Mechanical access parking garage vehicle drop-off & pick-up areas**

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Passenger Loading Zones

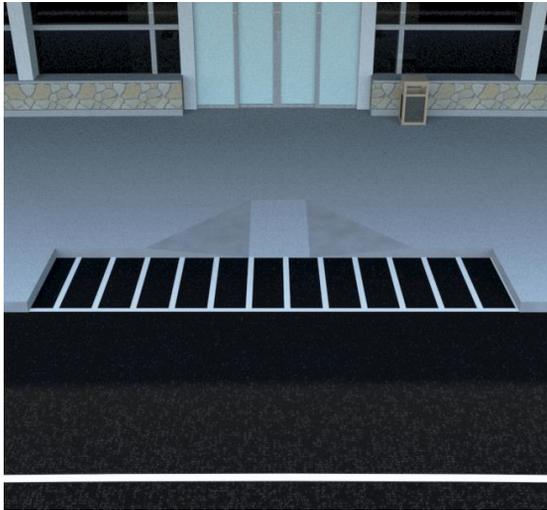
Scoping (cont.)

- **For all other facility types: Where Provided**
- **Requires one accessible zone for every 100 linear feet of loading zone space**

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Loading Zone Vehicle Space



- Vehicle pull-up space must be at least 20' long (8' minimum width)
- Standards do not define length of loading zone
- at least one accessible passenger loading zone every continuous 100 linear feet of loading zone space

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Loading Zone Access Aisle

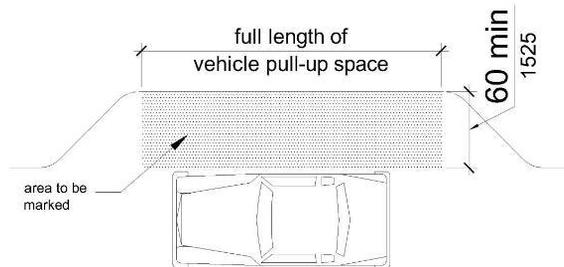
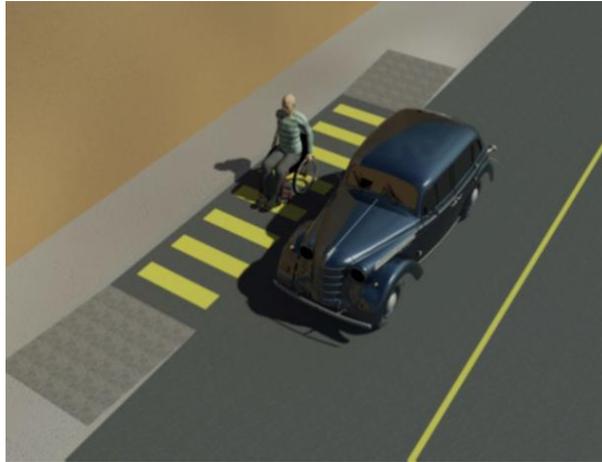


Figure 503.3
Passenger Loading Zone Access Aisle

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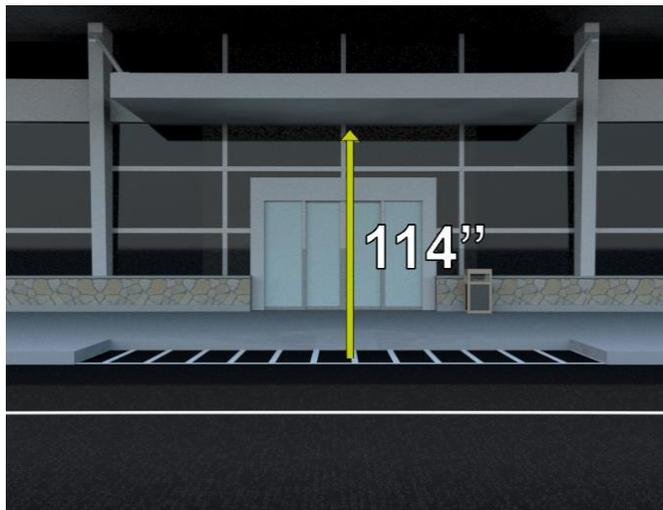
Loading Zone Access Aisle



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Loading Zone Vertical Clearance



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Stairs

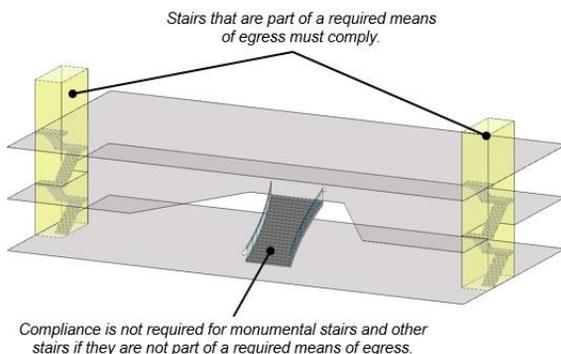
Scoping Requirements (§210)

Technical Requirements (§504)

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Stairs Scoping

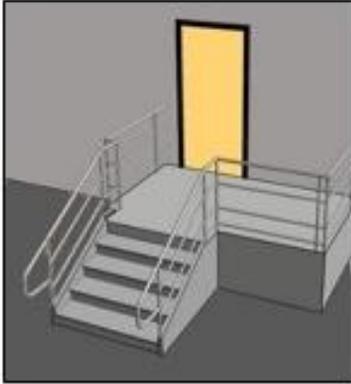


Interior and exterior stairs that are part of a required means of egress must meet the Standards.

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Stairs Scoping



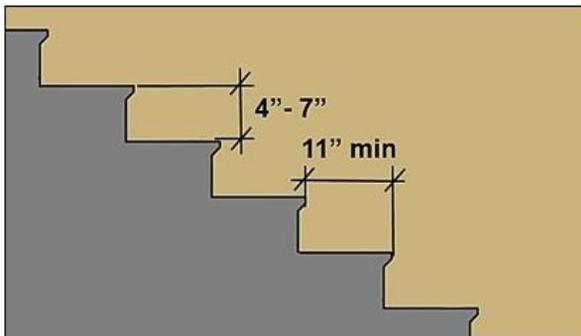
Stairs that are part of an exit discharge or other components of a means of egress must comply.

In alterations, stairs between levels that are connected by an accessible route (e.g., ramp or elevator) are not required to meet the Standards, but handrails must comply when stairs that are part of a means of egress are altered (§210.1, Ex. 2).

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Treads and Risers



Uniform Tread and Risers

Tread Depth:
11 inches min.

Riser Height:
4-7 inches

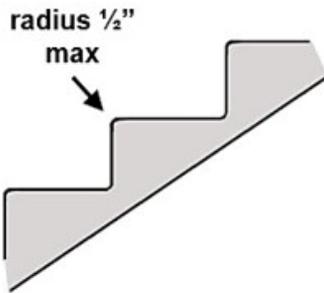
No open risers

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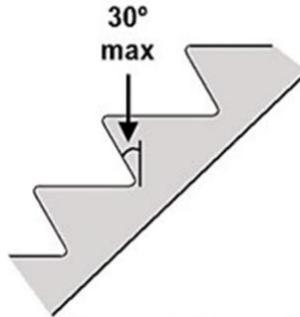
Stair Nosings

Tread Edge Radius



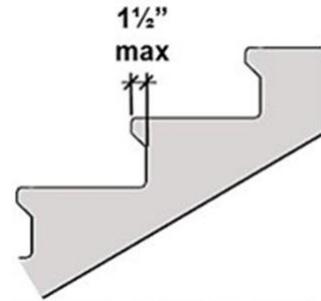
The radius of curvature at the leading edge of the tread must be 1/2" max.

Angled Riser



Risers can slope under the tread at an angle not exceeding 30° from vertical.

Curved or Beveled Nosing



Nosings cannot project more than 1 1/2" over the tread below, and the underside of the leading edge of the nosing must be curved or beveled.

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Handrails

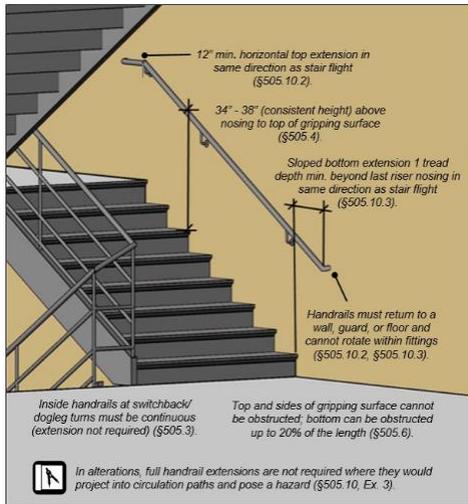
Technical Requirements (§505)

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Handrail Location

Stairs



- Handrails are required on both sides of stairs.
- Must be continuous within the full length of each stair flight.
- Inside handrails on switchback or dogleg stairs must be continuous.

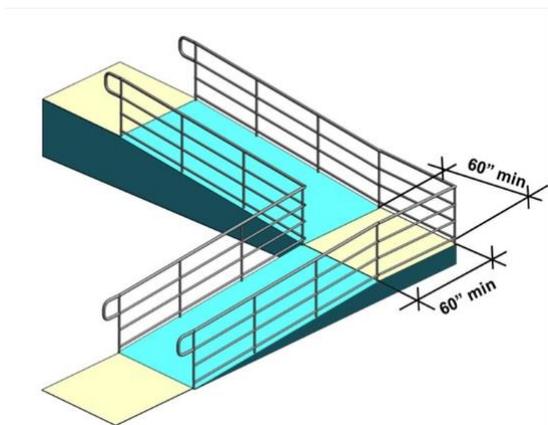
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Handrail Location

Ramps

- Handrails are required on both sides of ramps (> 6 inches elevation change).
- Must be continuous within the full length of each ramp run.
- Inside handrails on switchback or dogleg ramps must be continuous.
- Curb ramps are NOT required to have handrails



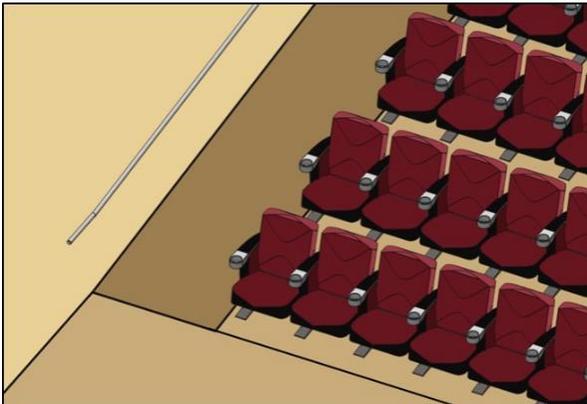
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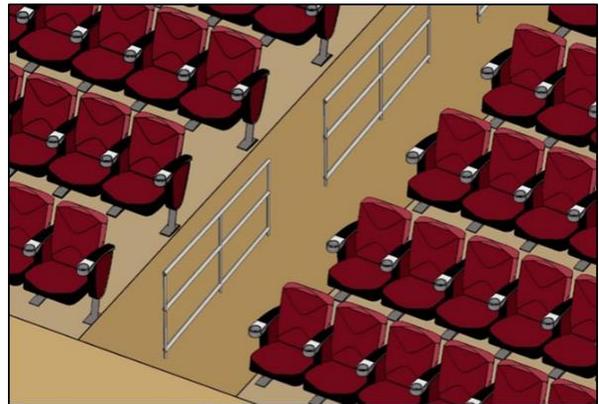
Handrail Location

Assembly Facility Exemptions

Exception allows handrail on one side



Exception allows non-continuous handrail

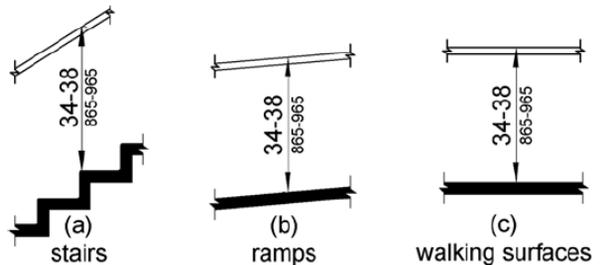


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Handrails

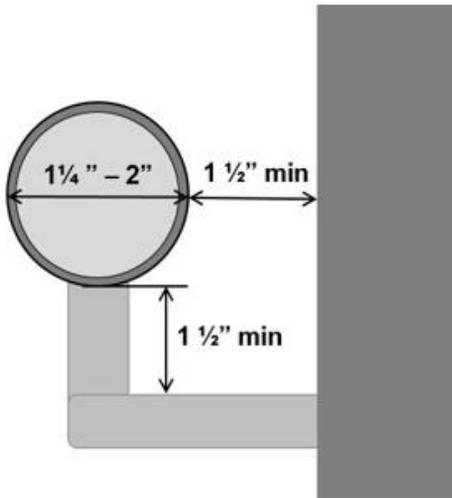
- Top of gripping surfaces between 34 min. and 38 max. inches vertically above:
 - stair nosings
 - ramp surfaces
 - and walking surfaces.
- Handrails shall be at a consistent height above the same surfaces



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Handrails

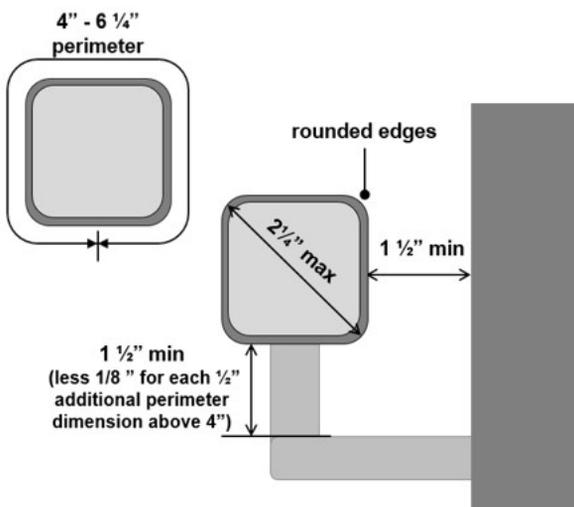


- Handrails can have circular or non-circular cross-sections with rounded edges.
- The gripping surface and adjacent surfaces must be free of abrasive or sharp elements.

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Handrails



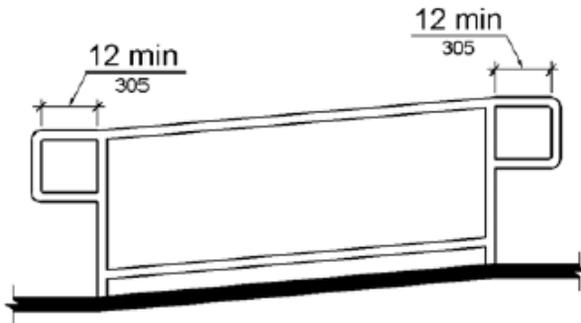
- Non-circular cross sections must meet perimeter and cross-section dimensions requirements.
- Wall-mounted handrails with leading edges higher than $27''$ cannot protrude more than $4\frac{1}{2}''$ into circulation paths (§307.2).

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Handrails

Extensions



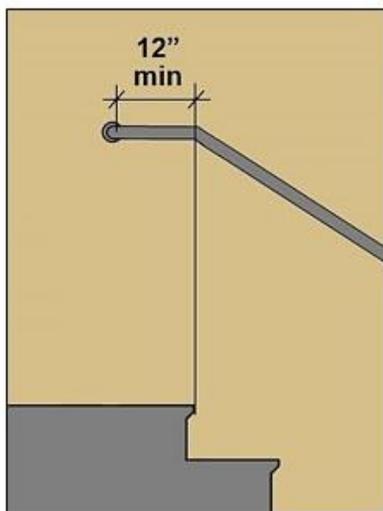
- **Extensions 12 inches min. (in the same direction of travel) are required at the top and bottom of runs.**
- **Except for inside rail of switchback ramps.**

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Handrail Extensions

Top



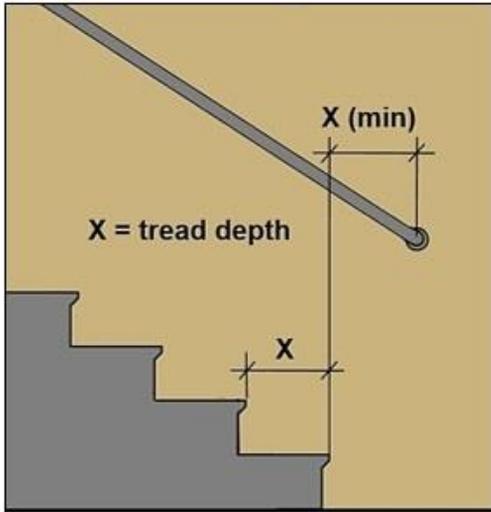
- **Top handrail extensions at stairways must extend 12" min. horizontally above the landing beginning directly above the first riser nosing.**
- **Or be continuous to the handrail of an adjacent stair flight.**

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Handrail Extensions

Bottom



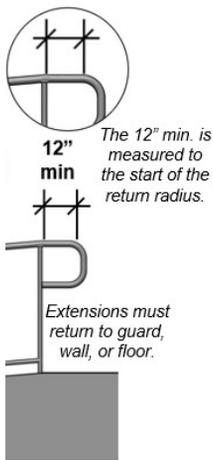
- **Bottom handrail extensions at stairways must extend beyond the last riser nosing at the slope of the stair flight for a distance at least equal to one tread depth.**
- **Or be continuous to the handrail of an adjacent stair flight.**

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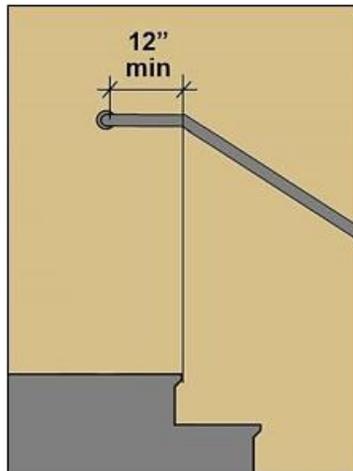
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Handrail Extensions

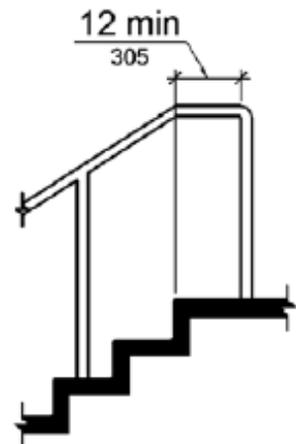
Return to guard



Return to Wall



Return to Floor



In alterations: full handrail extensions are not required where they would project into circulation paths and pose a hazard.

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Questions?

You May Type and Submit questions in the Chat Area Text Box or press Control-M and enter text in the Chat Area

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Technical Guides on the Standards

Available on the Board's website

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“Advancing Full Access and Inclusion for All”

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Continuing Education



AIA Provider Number: I017

AICP Provider Name: Great Lakes ADA Center

Course Title: Using the ADA and ABA Standards Series: Chapter 5: General Site and Building Elements

Course Number: GL20200604

Date: June 4, 2020

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Questions will be addressed at the conclusion of this presentation.

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**Thank you for participating
in today's webinar**



**Next session:
July 2, 2020**

**USING THE ADA AND ABA STANDARDS SERIES: CHAPTER 6:
PLUMBING ELEMENTS AND FACILITIES**

2:30 pm – 4:00 pm EST

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