ADA COMPLIANCE IN PUBLIC RIGHTS-OF-WAY

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City of Pasadena
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Americans with Disabilities Act

CIVIL RIGHTS LAW BUILT ON THE PRINCIPLES OF:

EQUAL OPPORTUNITY
FULL PARTICIPATION
INDEPENDENT LIVING
ECONOMIC SELF-SUFFICIENCY
No qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of a public entity, or be subjected to discrimination by any public entity, directly or through contractual licensing.
Fortyune vs. City of Lomita

• **Fortyune vs. City of Lomita**
  > Whether Title II of the ADA requires local governments to provide accessible on-street parking in the absence of regulatory design specifications for on-street parking facilities.

• **US Department of Justice (Amicus Curiae)**
  > Yes. “Under the plain language of Title II, provision and maintenance of public on-street parking is a “service, program, or activity” of the City, the benefits of which the City cannot deny to individuals with disabilities.”

• **9th Circuit**
  > Yes. “The text of the ADA, the relevant implementing regulations, and the DOJ’s interpretation of its own regulations all lead us to conclude that public entities must ensure that all normal governmental functions are reasonably accessible to disabled persons, irrespective of whether the DOJ has adopted technical specifications for the particular types of facilities involved.”
### Design Standards and Guidance

#### FEDERAL
- *Proposed Public Rights-of-Way Accessibility Guidelines (PROWAG)*
- *Manual on Uniform Traffic Control Devices (MUTCD)*
- *DOJ / DOT Joint Technical Assistance*

#### STATE
- *California Building Code*
- *CA MUTCD*
- *DOT Standard Specifications*
- *DOT Design Information Bulletins*
Legislature Passes Legislation

Guidelines
Access Board develops design criteria

Standards
DOJ/DOT adopts and enforces the standards

Federal Highway Administration: “FHWA considers the proposed guidelines to represent best practices for accessibility issues in the PROW not covered by the DOJ’s or DOT’s currently adopted standards”
About the Rulemaking on Public Rights-of-Way

Sidewalks, street crossings, and other elements in the public right-of-way can pose challenges to accessibility. The Board’s ADA and ABA Accessibility Guidelines focus mainly on facilities on sites. While they address certain features common to public sidewalks, such as curb ramps, further guidance is necessary to address conditions and constraints unique to public rights-of-way.

The Board is developing new guidelines for public rights-of-way that will address various issues, including access for blind pedestrians at street crossings, wheelchair access to on-street parking, and various constraints posed by space limitations, roadway design practices, slope, and terrain. The new guidelines will cover pedestrian access to sidewalks and streets, including crosswalks, curb ramps, street furnishings, pedestrian signals, parking, and other components of public rights-of-way. The Board’s aim in developing these guidelines is to ensure that access for persons with disabilities is provided wherever a pedestrian way is newly built or altered, and that the same degree of convenience, connection, and safety afforded the public generally is available to pedestrians with disabilities. Once these guidelines are adopted by the Department of Justice, they will become enforceable standards under title II of the ADA.

Proposed Guidelines (2011)
Proposed Guidelines for Pedestrian Facilities in the Public Right-of-Way

Published in the Federal Register on July 26, 2011.

36 CFR Part 1190
Docket No. ATBCB 2011-04

Note: On February 13, 2013, the Access Board issued a notice to supplement the proposed guidelines for public rights-of-way to address shared use paths.

PREAMBLE

AGENCY: Architectural and Transportation Barriers Compliance Board.

ACTION: Notice of Proposed Rulemaking.

SUMMARY: The Architectural and Transportation Barriers Compliance Board is proposing accessibility guidelines for the design, construction, and alteration of pedestrian facilities in the public right-of-way. The guidelines ensure that sidewalks, pedestrian street crossings, pedestrian signals, and other facilities for pedestrian circulation and use constructed or altered in the public right-of-way by state and local governments are readily accessible to and usable by pedestrians with disabilities. When the guidelines are adopted, with or without additions and modifications, as accessibility standards in regulations issued by other federal agencies implementing the Americans with Disabilities Act, Section 504 of the Rehabilitation Act, and the Architectural Barriers Act, compliance with the accessibility standards is mandatory.

DATES: Submit comments by November 23, 2011. Hearings will be held on the proposed guidelines on the following dates:

- September 12, 2011, 9:30 to 11:30 a.m., Dallas, TX.
- November 9, 2011, 9:30 to 11:30 a.m., Washington, DC.

ADDRESSES: Submit comments by any of the following methods:

- E-mail: row@access-board.gov. Include docket number ATBCB 2011-04 in the subject line of the message.
- Fax: 202-272-0081.
• Chapter R1: Application and Administration
  > Purpose, Equivalent Facilitation, Conventions, Reference Standards (MUTCD), Definitions

• Chapter R2: Scoping Requirements
  > When do the technical requirements apply?

• Chapter R3: Technical Requirements
  > What are the technical requirements specific to public rights of way?

• Chapter R4: Supplementary Technical Requirements
  > Excerpts from ADA 2010 Standards for Accessible Design with minor modifications
SCOPE

• R201: General Scope
• R202: Alterations and Elements added to existing facilities
• R203: Machinery spaces
• R204: Pedestrian Access Routes (sidewalks, street crossings, overpasses and underpasses)
• R205: Alternate Pedestrian Access Routes
• R214: On-Street Parking

TECH REQUIREMENTS

• R301: Scope of Technical Requirements
• R302: Pedestrian Access Routes
• R303: Alternate Pedestrian Access Routes
• R309: On-Street Parking Spaces
• **Public Right-of-Way.** Public land or property, usually in interconnected corridors, that is acquired for or dedicated to transportation purposes.

• **Facility.** All or any portion of buildings, structures, improvements, elements, and pedestrian or vehicular routes located in the public right-of-way.

• **Element.** An architectural or mechanical component of a building, facility, space, site, or public right-of-way.

• **Pedestrian Access Route.** A continuous and unobstructed path of travel provided for pedestrians with disabilities within or coinciding with a pedestrian circulation path.

• **Pedestrian Circulation Path.** A prepared exterior or interior surface provided for pedestrian travel in the public right-of-way.

• **Alteration.** A change to a facility in the public right-of-way that affects or could affect pedestrian access, circulation, or use. Alterations include, but are not limited to, resurfacing, rehabilitation, reconstruction, historic restoration, or changes or rearrangement of structural parts or elements of a facility.
**Industry Tolerances**

- Dimensions subject to conventional industry tolerances except where dimensions are stated as a range.

**Percentages**

- Calculation determines required number of elements/facilities = round up.
- Calculation determines size or dimension = rounding down for values less than 1/2 permitted.
PROWAG Scope

- **PROWAG applies to**
  - New construction
  - Alterations
  - Additions
  - Temporary and permanent facilities

- **Does not apply to**
  - Machinery Spaces

Buildings and structures in public right-of-way but not covered by PROWAG must comply with the [2010 ADA Standards for Accessible Design](#) (“ADA Standards”)
Must comply with the applicable requirements for new construction

Reduction in access prohibited

Exception for existing physical constraints:

> “Where existing physical constraints make it impracticable for altered elements, spaces, or facilities to fully comply with the requirements for new construction, compliance is required to the extent practicable within the scope of the project. Existing physical constraints include, but are not limited to, underlying terrain, right-of-way availability, underground structures, adjacent developed facilities, drainage, or the presence of a notable natural or historic feature.” R202.3.1

Alterations to Qualified Historic Facilities:

> Compliance required to the extend that it does not threaten or destroy historically significant features
Existing Physical Constraint
• 28 CFR Part 35 § 35.151

> Facilities shall be designed and constructed so they are readily accessible to and usable by people with disabilities

> Exception for structural impracticability

  ▪ In “rare circumstances when the unique characteristics of terrain prevent the incorporation of accessibility features”
  ▪ Make facility accessible to the extent that it is not structurally impracticable
  ▪ If accessibility impracticable for individuals with certain disabilities (e.g., those who use wheelchairs), still provide access to individuals with other disabilities (i.e. vision impairment)
Pedestrian Access Routes
R204: Scope

• Provided within:
  > Sidewalks and pedestrian circulation paths located in public right-of-way
  > Pedestrian street crossing (including medians, refuge islands, etc.)
  > Pedestrian overpasses, underpasses, bridges, and similar structures
    ▪ If designed for pedestrian use only and approach slope to structure is >5%, a ramp, elevator, or platform lift is required

• Connect to:
  > Accessible elements, spaces, and facilities in the public right-of-way
    ▪ Pedestrian signals, street furniture, boarding and alighting areas, transit shelters, accessible on-street parking spaces, parking meters and pay stations serving accessible parking spaces, accessible passenger loading zones
  > Accessible routes required by ADA Standards
Pedestrian Access Routes
R302: Technical Requirements

- **Continuous clear width:** 4 ft min
  - Medians & pedestrian refuge islands: 5 ft min

- **Passing space:** 5x5 ft min, every 200ft
  - Does not apply if clear width > 5ft

- **Grade:** 5% max
  - If route contained within a street or highway right of way, grade shall not exceed grade established for adjacent street or highway

- **Cross slope:** 2% max
  - 5% max if access route in pedestrian street crossing without yield or stop control
  - May equal street or highway grade within midblock pedestrian street crossing

- **Surfaces:**
  - firm, stable, slip resistant
  - Vertical surface discontinuities: 1/2 in max, beveled with ≤50% slope if 1/4-1/2 in
  - Horizontal openings: no greater than 1/2 inch sphere, perpendicular to dominant direction of travel
 Alternate Pedestrian Access Routes
R205: Scope

• Alternate routes must comply with MUTCD sections:
  > 6D.01:
  > 6D.02:
  > 6G.05

• Barricades and channelizing devices shall comply with MUTCD sections:
  > 6F.63
  > 6F.68
  > 6F.71
What is the required clear width of an alternate pedestrian access route?

> Pedestrian Considerations for California TTC Zones
  - “Should be 60 inches”

> MUTCD 6D.01:
  - “Width of existing pedestrian facility should be provided if practical”
  - “When not possible to maintain a minimum width of 60 inches throughout the entire length of the pedestrian pathway, a 60 x 60-inch passing space should be provided at least every 200 feet to allow individuals in wheelchairs to pass.”

> California Building Code, Chapter 11B:
  - Clear width of sidewalk = 4 ft
  - If compliance with 4 ft requirement creates unreasonable hardship due to right-of-way restrictions, natural barriers, or other existing conditions, clear width may be reduced to 3 ft

> PROWAG
  - Look to MUTCD for compliance requirements
On-Street Parking Spaces
R214: Scope

- Count based on
  - Total marked or metered spaces
  - On a single block perimeter
- When pay to park, but not marked, 20ft = 1 space
- No requirement for van parking
- Accessible parking signs with ISA required
- Alteration on part of block perimeter → scoping based on whole block perimeter
Parallel On-Street Parking
R309.2: Technical Requirements

- **Adjacent right of way ≤ 14 ft = NO access aisle required**
  > Parking located at end of block face
  > Once minimum number met, accessible parking may be located mid-block

- **Adjacent right of way > 14 ft = access aisle required**
  > 5 ft min width, street level, full length of space, does not encroach on vehicular travel lane, connects to pedestrian access route
  > Grade and cross slope can match street
  > In alterations where street or sidewalk adjacent to parking is not altered, access aisle is not required SO LONG AS space is at the end of the block face.
  > Detectable warnings not required at access aisle

- Access aisle served by curb ramp or blended transition that complies with R304

- Adjacent sidewalk should be free of obstruction
Figure R309.2.1 Wide Sidewalks
Parallel On-Street Parking
R309.2: Technical Requirements

Figure R309.2.2 Narrow Sidewalks
Perpendicular or Angled Parking
R309.3: Technical Requirements

- Access aisle required at street level
  - 8.0 ft wide min
  - Full length of parking space
  - Connected to pedestrian access route
  - Complies with surface requirements for access routes (R302.7)
  - Marked to discourage parking in the access aisle
  - Two parking spaces may share common aisle
  - Served by curb ramp or blended transition that complies with R304
    - Ramp NOT located within access aisle
On-Street Parking Meters
R309.5: Technical Requirements

- Parking meters and pay stations
  - Operable parts comply with R403
  - Located at head or foot of parking space
  - Information visible from a point located 3.3 ft maximum above center of clear space in front of parking meter or pay station

Figure R406.3 Unobstructed Side Reach
On-Street Accessible Parking
When is it required?

• In the absence of new construction or alterations, is accessible on-street parking still required??
  > PROWAG: No
  > ADA Title II: Probably
  > Fortuyne vs. City of Lomita (9th circuit): Yes, but…

• What standard?
  > PROWAG (scope and design)
  > Caltrans Standard Plan (no scope, only design)

• If on-street parking space provided where not required by standard, does it still need to comply with standards?
  > Local entity decision
• California Disabled Access Guide (CalDAG)  
  > Cross references ADA Standards and CBC

• United States Access Board  
  > www.access-board.gov  
  > TA Hotline: (202) 272-0080  
  > Scott Windley: (202) 272-0025

• Department of Justice, Civil Rights Division  
  > www.ada.gov  
  > ADA Information Line: (800) 514-0301

• California Division of State Architect  
  > www.dgs.ca.gov/dsa/programs/progaccess.aspx  
  > Ida Clair: (916) 322-2490, ida.clair@dgs.ca.gov

• Pacific ADA Center  
  > ADA Assistance: (800) 949-4232

• Your Entity’s ADA Coordinator
Thank You!

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Chapter R2: Scoping

- **R201**: General Scope
- **R202**: Alterations and Elements added to existing facilities
- **R203**: Machinery spaces
- **R204**: Pedestrian Access Routes (sidewalks, street crossings, overpasses and underpasses)
- **R205**: Alternate Pedestrian Access Routes
- **R206**: Pedestrian Street Crossings
- **R207**: Curb Ramps and Blended Transitions
- **R208**: Detectable Warning Surfaces
- **R209**: Accessible Pedestrian Signals and Pedestrian Pushbuttons
- **R210**: Protruding Objects
- **R211**: Signs
- **R212**: Street Furniture
- **R213**: Transit Stops and Transit Shelters
- **R214**: On-Street Parking
- **R215**: Passenger Loading Zones
- **R216**: Stairways and Escalators
- **R217**: Handrails
- **R218**: Doors, Doorways, Gates
Chapter R3: Technical Requirements

• **R301**: Scope of Technical Requirements
• **R302**: Pedestrian Access Routes
• **R303**: Alternate Pedestrian Access Routes
• **R304**: Curb Ramps and Blended Transitions
• **R305**: Detectable warning surfaces
• **R306**: Pedestrian Street Crossings
• **R307**: Accessible Pedestrian Signals and Pedestrian Pushbuttons
• **R308**: Transit Stops and Transit Shelters
• **R309**: On-Street Parking Spaces
• **R310**: Passenger Loading Zones
ALL pedestrian street crossings must be accessible to pedestrians with disabilities

Signal phase timing shall comply with MUTCD 4E.06

CA MUTCD 10a: Where older or disabled pedestrians routinely use the crosswalk, a walking speed of 2.8 feet per second should be considered in determining the pedestrian clearance time

Roundabout requirements and advisory notes: See R306.3

Multi-lane channelized turn lanes require APS
• Connect pedestrian access routes at each pedestrian street crossing
• Contained wholly within width of pedestrian street crossing
• In alterations, if existing physical constraints prevent compliance, a single diagonal curb ramp may serve both street crossings
COMMON REQUIREMENTS

- **Clear width**: 4ft min
  - Applies to ramp runs (excluding flared sides), blended transitions, turning spaces

- **Grade breaks** at top and bottom of ramp run shall be perpendicular to direction of ramp run
  - Not permitted on surface of ramp runs and turning spaces
  - Surface slopes that meet at grade breaks shall be flush

- **Cross slope**: 2% max
  - Grade of street/highway permitted if midblock crossing or no yield/stop

- **Counter slope**: 5% max

- **Clear space**: 4x4 ft beyond bottom of grade break, within width of pedestrian street crossing, and wholly outside of the parallel vehicle travel lane
Figure R304.5.2 Grade Breaks

Grade break is perpendicular to direction of travel.
Curb Ramps and Blended Transitions
R304.5: Technical Requirements

Figure R304.5.5 Clear Space

1.2 m min
4.0 ft

1.2 m min
4.0 ft

1.2 m min
4.0 ft
• **Running Slope:** 5% min, 8.3% max
  > Cut through or built up to curb at right angles or shall meet gutter grade break at right angles where curb curved
  > Ramp no longer than 15 ft

• **Flared Sides:** 10% max slope where pedestrian circulation path crosses curb ramp
Perpendicular Curb Ramps
R304.2: Technical Requirements

Figure 304.2.3 Flared Sides
• **Turning space: 4x4 min at top of ramp**

  > 4x5 ft min where turning space constrained at back of sidewalk (5ft in direction of ramp run)

  > Running slope 2% maximum
Figure R304.2.1 Turning Space
• **Running Slope:** 5% min, 8.3% max
  > In line with direction of sidewalk travel
  > Ramp no longer than 15 ft

• **Turning space:** 4x4 min at bottom of ramp
  > 4x5 ft min where turning space constrained on two or more sides (5ft in direction of pedestrian street crossing)
  > Running slope 2% maximum
Figure R304.3.1 Turning Space

- 1.5 m min
- 1.2 m min
- 1.2 m min
Detectable Warning Surfaces
R208: Scope

• Required at:
  > Locations where there is a flush rather than curbed connection at the boundary between pedestrian and vehicular routes

• Recommended at:
  > Commercial driveways equipped with yield or stop control

• Not required at:
  > Pedestrian refuge islands cut through at street level and less than 6ft in length in the direction of pedestrian travel
  > Residential driveways
• Is a certain color required for detectable warning surfaces?

- White
- Light Gray
- White Concrete
- Brown Concrete
- Dark Gray
- Federal Yellow
- Pale Yellow
- Bright Red
- Orange-Red
- Black
Study conducted to determine which colors are visually detectable and conspicuous to pedestrians with visual impairments.

Table 1. Detectable warning contrast effectiveness assessments based upon FHWA study data

<table>
<thead>
<tr>
<th>Detectable Warning Color</th>
<th>Surface material surrounding detectable warning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Asphalt</td>
</tr>
<tr>
<td>Bright white [e.g., FS 37875]</td>
<td></td>
</tr>
<tr>
<td>R = .74; (x = .333, y = .347)</td>
<td>Good</td>
</tr>
<tr>
<td>White (beige sand texture)</td>
<td></td>
</tr>
<tr>
<td>R = .64; (x = .352, y = .364)</td>
<td>Good</td>
</tr>
<tr>
<td>Pale yellow [e.g., FS 23594]</td>
<td></td>
</tr>
<tr>
<td>R = .47; (x = .412, y = .414)</td>
<td>Good</td>
</tr>
<tr>
<td>Federal yellow [e.g., FS 35338]</td>
<td></td>
</tr>
<tr>
<td>R = .46; (x = .511, y = .454)</td>
<td><strong>Very good</strong></td>
</tr>
<tr>
<td>Light gray [e.g., FS 26280]</td>
<td></td>
</tr>
<tr>
<td>R = .24; (x = .326, y = .341)</td>
<td>Not recommended</td>
</tr>
<tr>
<td>Brown (beige sand texture)</td>
<td></td>
</tr>
<tr>
<td>R = .17; (x = .390, y = .386)</td>
<td>Not recommended</td>
</tr>
<tr>
<td>Orange-red [e.g., FS 22144]</td>
<td></td>
</tr>
<tr>
<td>R = .13; (x = .533, y = .356)</td>
<td>OK</td>
</tr>
<tr>
<td>Bright red [e.g., FS 31120]</td>
<td></td>
</tr>
<tr>
<td>R = .11; (x = .587, y = .323)</td>
<td>Good</td>
</tr>
<tr>
<td>Dark gray [e.g., FS 36118]</td>
<td></td>
</tr>
<tr>
<td>R = .09; (x = .320, y = .331)</td>
<td>Not recommended</td>
</tr>
<tr>
<td>Black [e.g., FS 17038]</td>
<td></td>
</tr>
<tr>
<td>R = .02; (x = .324, y = .338)</td>
<td>Not recommended</td>
</tr>
</tbody>
</table>
• **PROWAG:**
  > “shall contrast visually with adjacent gutter, street highway or pedestrian access route”

• **ADA Standards**
  > “Shall contrast visually with adjacent walking surfaces”

• **CBC (11B-705.1.1.3):**
  > Federal Yellow:
    ▪ Hazardous vehicular areas, reflecting pools, track crossings, transit boarding platform edges, bus stops
  > Federal Yellow OR provide a 70% minimum visual contrast with adjacent walking surface:
    ▪ All other surfaces

• **California DOT Standard Specifications (73-01.02B)**
  > Detectable warning surfaces at concrete curbs and sidewalks must match Federal Yellow
• **Dome alignment**: square or radial grid pattern

• **Dome size**
  > Base diameter: 0.9in – 1.4 in
  > Top diameter: 50% – 65% of base diameter
  > Height: 0.2 in

• **Dome spacing**
  > Center to center spacing: 1.6 in – 2.4 in
  > Base to base spacing: 0.65 in minimum, measured between most adjacent domes

• **Contrast**
  > Contrast visually with adjacent gutter, street or highway, or pedestrian access route surface
- **Size**: 2 ft min in the direction of pedestrian travel
- **Width and placement**: See R305.2
• **Scope:** R209
  > Where pedestrian signals provided, they shall be accessible
    ▪ Alteration = signal controller and software altered, or signal head replaced
  > Operable parts must comply with R403
    ▪ Clear space provided
    ▪ Within reach ranges
    ▪ Operable with one hand
    ▪ Does not require tight grasping, pinching, or twisting of wrist
    ▪ Force to activate is 5lbs max

• **Technical requirements:** MUTCD 4E.08 - 4E.13
• Comply with surface requirements for access routes (R302.7)
• Connected to streets, sidewalks, or pedestrian circulation paths by pedestrian access routes complying with R302
• Boarding and alighting at sidewalk or street level
  > 8 X 5 ft clear length
  > Grade:
    ▪ Parallel: same as street or highway, to the extent practicable
    ▪ Perpendicular: 2% max
• Boarding platforms
  > Coordinated height of vehicle floor and station platform (49 CFR parts 37-38)
  > Slope: 2% max in any direction
    ▪ If platform service vehicles operating on existing track, street, or highway, the parallel slope of platform may be equal to grade of track, street, or highway
Transit Stops
R308: Technical Requirements

Figure R308.1.1.1 Dimensions

Figure R308.1.3.2 Connection
Transit Shelters
R308: Technical Requirements

- Connected to boarding and alighting area by pedestrian access route complying with R302 or boarding platform complying with R308.1
- Provide minimum clear space complying with R404 that is entirely within shelter
- When seating provided within shelter, clear space located at one end of a seat or shall not overlap area within 1.5 ft from front edge of seat
- Protruding objects comply with R402
- Environmental controls within shelter shall be proximity-actuated
Objects along or overhanging any portion of a pedestrian circulation path:

> Shall not reduce the clear width for pedestrian access routes
> Shall comply R402
Figure R402.3 Post-Mounted Objects
• Signs must comply with R410
  > Pedestrian information signs
    ▪ Exception: equivalent facilitation through audible sign system or other technology
  > Signs that identify the routes served by transit stops
    ▪ Does not include transit schedules, timetables, and maps

• R410: Visual Characters on Signs
  > Finish and contrast
  > Case
  > Font
  > Character proportion, height, thickness, spacing
  > Line spacing
  > International Symbol of Accessibility
• Signs must comply with R411
  • Accessible parking spaces
  • Accessible passenger loading zones
  • Sign located at head or foot of space or zone

• R411: International Symbol of Accessibility
  • Non-glare finish
  • Symbol contrasts with background
• ADA Standards
  > **Drinking fountains:** sections 602.1-602.6
  > **Public toilet facilities:** sections 206.2.4 and 603
    ▪ At least one fixture of each type provided shall comply with 604-610
    ▪ Where multiple single-user toilet facilities clustered at one location, at least 5%, but no less than one, must comply as above and be identified by ISA
  > **Tables:** section 902
    ▪ At least 5%, but no less than one, must comply with ADA Standards 902
  > **Counters:** section 904

• PROWAG
  > **Benches:** at least 50%, but no less than one, shall provide clear space complying with R404 adjacent to bench
    ▪ Clear space located at one end of bench or shall not overlap area within 1.5 ft from front edge of bench
• Passenger loading zones (other than transit stops)
  > At least one zone complying with R310 provided for each 100 feet of continuous loading zone space or fraction thereof

• R310: Technical Requirements
  > Vehicle pull-up space
    ▪ 8 ft wide min
    ▪ 20 ft long min
  > Access aisle
    ▪ 5 ft wide min
    ▪ Otherwise, same requirements as perpendicular and angled parking

![Figure R310.3 Access Aisle](image)
• **Handrails**
  > Where provided on pedestrian circulation paths, comply with R409

• **Doors, Doorways, Gates**
  > Where provided at pedestrian facilities, comply with ADA Standards section 404