ADA Compliance Training

Keith P. Skilton  
Local Programs Engineer  
FHWA - NJ Division  
840 Bear Tavern Road, Suite 310  
West Trenton, NJ 08628  
Phone: 609-637-4203  
Fax: 609-538-4919  
keith.skilton@dot.gov

Note: Pictures may depict non-compliant curb ramps
FHWA supports NJDOT’s Complete Streets Policy and has the regulatory responsibility to ensure ADA Laws and Standards are adhered to during the planning, design, and construction of projects, regardless of funding source.
Introduction

**FHWA Stewardship/Oversight Responsibilities**

- Ensure that Complete Streets Sponsors are informed of their responsibilities to provide accessibility in their facilities (i.e., public rights-of-way).

- Ensure that Complete Streets Sponsors are applying appropriate accessibility standards to their projects.
Introduction

- FHWA encourages an increases emphasis on the planning and design of proposed facilities.
- New construction shall meet ADA requirements with no exceptions.
- Alterations shall meet ADA requirements to the maximum extent feasible with technically infeasible documentation.
ADA Links

United States Access Board - Sidewalk Videos

ADA Accessibility Guidelines for Buildings and Facilities (ADAAG)
http://www.access-board.gov/adaag/html/adaag.htm

Public Rights-of-Way (PROW) Draft Guidelines
http://www.access-board.gov/prowac/draft.htm

Special Report: Accessible Public Rights-of-Way Planning and Design for Alterations
http://www.access-board.gov/prowac/alterations/guide.htm

Federal Highway Administration (FHWA) Designing Sidewalks and Trails for Access (Chapter 7 curb ramps)
http://www.fhwa.dot.gov/environment/sidewalk2/index.htm

Common Problems Arising in the Installation of Accessible Pedestrian Signals
http://www.access-board.gov/research/pedestrian-signals/bulletin.htm

FHWA Accessibility Resource Library
http://www.fhwa.dot.gov/accessibility/index.cfm
Curb Ramp Components

- **Approach**
- **Landing**
- **Approach**

- **Ramp**
- **Flare**
- **Flare**

**Gutter**

**4 ft x 4 ft (2% both directions)**

- **2% max**
- **7.1% preferred**
- **8.3% max**

**10% max not part of the 'accessible route'**

**5% max**

**2% max for diagonal ramps**

Designing Pedestrian Facilities for Accessibility
Ramp Grade

- Recommended maximum grade to allow for construction tolerance - 7.1%
- Maximum grade - 8.3%
- Least slope possible is preferred
- When “chasing grade,” ramp length need not exceed 15’, but slope must be uniform (PROWAG)
Ramp Length

Ramp Length = \frac{\text{curb height}}{(\text{ramp slope}) - (\text{sidewalk cross slope})}

- Sample ramp length calculation
  \[ \frac{6”}{(8.3\% - 2\%)} = 7’ 11” \]
- Higher curb or flatter ramp grade = longer ramp

2 percent slope

8.3 percent ramp slope

landing 1.22 m (48 in)
curb ramp 2.419 m (95.24 in)
Change of Grade

- PROWAG allows 8.3% ramp plus 5% grade at the adjacent street = 13.3%
- Recommendation calls for:
  - 11% maximum
  - Provide 2’ level area if greater than 11%
Landing

- Min. 4.0 ft. by 4.0 ft. landing shall be provided at the top of the curb ramp and shall be permitted to overlap other landings and clear space.
- Running and cross slopes at intersections shall be 2 percent maximum.
- Running and cross slope at midblock crossings shall be permitted to be warped to meet street or highway grade.
Bottom Landing

Bottom of ramp must have 48 x 48 inch level (2% max) clear space outside of vehicle travel lanes
Drainage at Curb Ramps

- Drainage can be difficult because gutter grade should not exceed 2%
- To prevent standing water at the base of ramps:
  - Place inlets upstream of ramps
  - Widen the gutter pan and flatten at the ramp
  - The gutter pan counter slope must be flatter than the running slope of the ramp; a steeper gutter cross slope can resume outside the ramp
Median Openings

Non-Walk Surface

6'-0" Min

24"

24"

5'-0" Min

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Driveway Details

- Driveway Slope: 8.33% Max
- Roadway Slope: 2.00% Max
- 4`-0" Min Access Path
- 5`-0" Min Sidewalk
- 8.33% Max Access Path

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Example #1
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U.S. Department of Transportation
Federal Highway Administration

2.00% Max

4'-0" min

4'-0" min
Example #2

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Example #3

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Example #4

Designing Pedestrian Facilities for Accessibility
Example #4

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