ADA for Transportation Projects

NATIONAL

2006 ADA Standards for Transportation Facilities (ADASTF)
https://www.access-board.gov/files/ada/ADAdotstandards.pdf

2010 ADA Standards for Accessible Design (ADASAD)

Department of Justice/Department of Transportation Joint Technical Assistance on the Title II of the Americans with Disabilities Act Requirements to Provide Curb Ramps when Streets, Roads, or Highways are Altered through Resurfacing (USDOJ/USDOT TA Memo)
dated October 25, 2018
https://www.fhwa.dot.gov/civilrights/programs/doj_fhwa_ta.cfm

dated January 23, 2006
https://www.fhwa.dot.gov/environment/bicycle_pedestrian/resources/prwaa.cfm

STATE - FDOT

FDOT Design Manual (FDM)
https://www.fdot.gov/roadway/htm/default.shtm

FDOT Standard Plans (SP)
https://www.fdot.gov/design/standardplans/default.shtm

FDOT Standard Specifications (Spec)
https://www.fdot.gov/programmanagement/implemented/specbooks/default.shtm

FDOT Approved Products List (APL)
https://fdotwp1.dot.state.fl.us/ApprovedProductList/ProductTypes/Index/117

FDOT Accessing Transit Design Handbook (Transit Handbook)
https://www.fdot.gov/transit/pages/newtransitfacilitiesdesign.shtm
1.1 When must ADA criteria be considered?

Whenever the project impacts pedestrian facilities (e.g., sidewalks, curb ramps, crosswalks, pedestrian signals). The ADA Regulations require each facility or part of a facility constructed by, on behalf of, or for the use of a public entity to be designed and constructed so it is “readily accessible to and useable by individuals with disabilities.”

Therefore, every new construction or alteration project (i.e., reconstruction or RRR) must include accessible elements and features.

1.2 Which standards and/or guidelines apply to my project?

(1) Transportation projects involving pedestrian facilities within the State Highway System (SHS) rights of way must use the FDOT Standards.
(2) Transportation projects involving a facility and/or site for which the provision of a transportation service is the primary purpose (e.g., train station, bus stop) must follow the applicable FDOT Standards.
(3) Projects involving other, non-transportation related facilities and/or sites (e.g., office buildings, rest areas) must follow the FBC.
Projects involving facilities within non-state (i.e., county or city) public rights of way should primarily use the Florida Greenbook.

1.3 Are the Public Rights of Way Accessibility Guidelines (PROWAG) the current enforceable ADA standard in Florida?

No. FDOT has not adopted PROWAG as its ADA Standard. The FDOT Standards meet federal ADA requirements and must be used for pedestrian facilities on the State Highway System (SHS).

1.4 When must ADA criteria be used for new transportation projects?

Whenever existing pedestrian facilities will be altered or when new facilities are planned. There may be rare exceptions for “structural impracticability” where unique characteristics of terrain prevent the incorporation of accessibility features. If full compliance for persons with certain disabilities is structurally impracticable, accessibility must be provided for persons with other types of disabilities where it is not structurally impracticable. Also see Question 1.6.

1.5 When must ADA criteria be used for alterations to existing facilities?

The altered portions of existing pedestrian facilities must meet ADA requirements “to the maximum extent feasible.”

1.6 What if site conditions do not allow a required accessible feature?

When there are physical constraints (e.g., profile grades, right of way widths, large immovable objects), there are exceptions to ADA compliance for alterations to existing facilities:

1. For buildings and sites, each facility altered in a manner that affects or could affect the useability of the facility must, to the maximum extent feasible, be altered in such a manner that the altered portions of the facility are “readily accessible to and useable by individuals with disabilities.”

2. For public rights of way, where existing physical constraints make it impracticable for altered facilities to fully comply with the requirements, compliance is required to the extent practicable within the scope of the project. The following are examples of existing physical constraints: underlying terrain,
right of way availability, underground structures, adjacent developed facilities, drainage, or the presences of a notable natural or historic feature.

3. If providing accessibility to individuals with certain disabilities (e.g., those who use wheelchairs) would be structurally impracticable, accessibility must be ensured to individuals with other types of disabilities (e.g., those who use crutches or who have sight, hearings, or mental impairments).

1.7 What are the ADA responsibilities for Contractors?

Contractors are required to follow the construction documents, which include accessible features complying with federal ADA requirements.

1.8 What are the ADA responsibilities for Project Administrators and Inspectors?

Project Administrators and Inspectors are responsible to enforce the requirements for accessible features contained in the construction documents. Inspectors must use the following two Department checklists, ADA Inspection Guidelist and ADA Critical Requirements, to assist in ensuring the appropriate accessible features are included: https://www.fdot.gov/construction/constadm/guidelist. (Under the current fiscal year, see “Number 20: ADA – Accessibility Issues” in both lists.)

1.9 What are the ADA responsibilities when maintaining facilities?

Accessible features must be maintained to be accessible over the life of the facility. This applies to surface conditions, unobstructed clear widths, and operable elements, which must be “readily accessible to and useable by individuals with disabilities.” The Maintenance Rating Program (MRP) contains information for acceptable sidewalks: https://www.fdot.gov/maintenance/MaintRatingProgram.shtm.

1.10 How soon after discovery must deficient accessible features be corrected or repaired?

Generally, as soon as practicable based on the location, nature, and severity of the deficiency. For highly-used pedestrian facilities in popular and/or urban areas, corrections should be implemented as soon as possible – usually within a few hours or, at most, a few days after an issue has been identified.

For example: Grass growing over a sidewalk could probably be trimmed the next time a mowing crew visits the area. However, a crack in the sidewalk that is greater than ¼”
high may also be a safety issue (i.e., trip and fall) that needs to be fixed quickly. A damaged guardrail that hangs over a sidewalk or a broken curb ramp needs to be fixed quickly, to avoid blocking the pedestrian path or possibly causing injury.

1.11 Is the FDOT ADA Transition Plan available for review?

Yes. The FDOT ADA homepage provides a link to the program’s plan and methodology. Each year, the FDOT conducts significantly significant sampling of pedestrian rights of way to validate transition of facilities or to identify those features that are not compliant. The results of these validation efforts and the follow-up Corrective Action Plan (CAP) are posted for public view on the ADA homepage: https://www.fdot.gov/roadway/ADA/.

1.12 Is the ADA Transition Plan only applicable to FDOT roadways or all roadways in Florida?

Yes. The FDOT has its own ADA Transition Plan for pedestrian facilities within the State Highway System (SHS) rights of way. Each local (i.e., county or city) agency must have an ADA Transition Plan that covers those transportation rights of way it owns or controls.

**Sidewalks**

2.1 Are sidewalks required by the ADA?

No. Inclusion of sidewalks along roadway corridors is not required by the ADA; but, when sidewalks are provided, they must comply with the ADA. “Accessible routes” connecting accessible entrances to buildings and parking facilities are required.

2.2 What are the requirements for sidewalks?

Requirements for sidewalks and driveways within State Highway System (SHS) rights of way are found in *SP Indices 522-001, 522-003, or 330-001*, and the *FDM Chapter 222*. 
2.3 When must sidewalks comply with the ADA?

All new sidewalks and altered portions of existing sidewalks must meet ADA criteria. One consistent requirement is the maximum cross slope of a sidewalk must be no greater than 2% (1:48).

For sidewalks parallel with and immediately adjacent to a roadway, the running slope of the sidewalk may follow the profile grade of the roadway.

For sidewalks on a site, the maximum running slope is 5% (1:20). Any slope greater than 5% is considered a “ramp” and must include handrails on both sides and 5-foot x 5-foot level landings every 30 inches of level change. The maximum allowable slope for a ramp is 8.3% (1:12).

2.4 How is the 2% maximum cross slope measured?

It is recommended to measure the concrete forms with a Smart Level and straight edge at multiple locations along the full length of new sidewalk construction. Deficiencies are much easier to correct before concrete is poured. Evaluate existing sidewalk intended “to remain” with a Smart Level at multiple locations between the project limits and bring deficiencies to the attention of the Engineer. Any sidewalk cross slope exceeding 2% (1:48) is not in compliance with ADA requirements.

2.5 If the sidewalk follows the natural grade that exceeds 5%, is it classified as a ramp?

Any running slope greater than 5% (1:20) is classified as a ramp. However, pedestrian facilities parallel with and adjacent to a roadway may follow the profile grade of the roadway. Also see Question 2.3.

2.6 Does asphalt pavement qualify as slip-resistant when it is wet?

Yes. Asphalt surfaces are generally considered slip-resistant and are often used for multi-use paths in Florida.
2.7 What is the vertical clearance requirement for sidewalks?

Per the FDM 222.2.1.2, a minimum 7 foot vertical clearance over the entire walking surface must be provided (i.e., no horizontal or vertical protrusions). See FDM 260.6 for pedestrian bridge vertical clearance requirements.

2.8 What are the drop-off protection requirements for pedestrian facilities?

See the FDM 215.3.3, 222.4, 224.15, and 240.2.1.14 for state projects and the Florida Greenbook Chapters 8 and 9 for local projects.

2.9 What happens when a sidewalk ends?

Particular attention must be given to pedestrian accommodations at the project terminus. If full accommodations cannot be provided due to the limited scope or phasing of a roadway project or an existing sidewalk is not present at the termini, an extension of the sidewalk to the next appropriate pedestrian crossing or access point should be considered.

2.10 Are brick pavers allowable as the walking surface of the sidewalk?

Brick pavers have commonly demonstrated a tendency for differential displacement between adjacent units. The resulting joints sometimes exceed the maximum allowable ½ inch horizontal opening and/or the ¼ inch vertical change in level. Additionally, some jurisdictions fail the contrasting color requirement by placing red detectable warning surfaces (DWS) within a surrounding red brick paver walking surface. So, while there is not official prohibition on the use of pavers, special attention must be given to compliance and serviceability issues during design, installation, and maintenance.

2.11 Can the top of the curb be included in the required unobstructed sidewalk width?

No. The required unobstructed width is measured from back of curb. For sidewalks not adjacent to back of curb, the unobstructed clear width is measured between the clear concrete edges of the walking surface.

2.12 What are the requirements when a project temporarily closes or blocks an existing sidewalk?

When an existing sidewalk is closed, an alternate pedestrian access route must be provided that complies with the Manual on Uniform Traffic Control Devices (MUTCD)
Sections 6D.01, 6D.02, and 6G.05. Pedestrian barricades and channelizing devices must comply with the MUTCD Sections 6F.63, 6F.68, 6F.71. When possible, detouring pedestrians from an existing pedestrian access route should be avoided. See FDM 240.

2.13 Are deficient sidewalks required to be reconstructed during a RRR project?

For RRR projects, other than meeting DWS and curb ramp requirements, unaltered sidewalks that are not in compliance with ADA requirements are not required to be reconstructed. See FDM 222.2.1. However, sidewalk corrections are often included in the RRR project to address valid complaints concerning deficient sidewalks within the project limits.


2.14 What must a Contractor do when a project closes or blocks an existing sidewalk?

Follow the Temporary Traffic Control Plan. See FDM 240.

Curb Ramps

3.1 Where are curb ramps required?

Curb ramps are required at all junctions of pedestrian ways and vehicular ways that are separated by a raised curb. The ramp (i.e., sloped surface) is useable by persons using wheeled mobility aides (e.g., wheelchairs, scooters). Place curb ramps at all intersections and turnouts with curbed returns. Include a level landing at the top of all curb ramps. The level landing may coincide with the level surface of the existing sidewalk, provided sufficient depth parallel to the ramp (i.e., 5 foot standard, 4 foot minimum) is available. Curb ramps are not required where the sidewalk and roadway are at the same level (i.e., blended transition). See SP Index 522-002.

3.2 What are the requirements for curb ramps?

Curb ramps must have the least running slope practicable but not to exceed 8.3% (1:12) and must be at least 48 inches wide. A level landing is required at the top that is at least as wide as the ramp’s sloped surface. The counterslope at the bottom of a curb ramp at
the gutter line must not be greater than 13.3% (i.e., 5% roadway cross slope + 8.3% ramp running slope = 13.3% algebraic difference counter slope). If the counterslope is expected to be greater than 11.3% (i.e., 3% roadway cross slope + 8.3% ramp running slope), it’s recommended to provide a 2 foot level landing at the bottom of the curb ramp. See FDM 222.2.2 and SP Index 522-002 for requirements.

3.3 If a curb ramp is provided on one side of an intersection, is it required to also provide a receiving ramp on the other side, even if it is outside the project limits?

Yes. Ramps must be provided on both ends of roadway crossings per FDM 222.2.2. Any alterations affecting pedestrian access must address barrier removal. It is a good idea to extend project limits during initial scoping to cover this situation. Another approach is to coordinate with the appropriate jurisdiction to have the receiving ramp installed or upgraded at the same time, so the pedestrian route limits are harmonized.

3.4 If the pedestrian facility (e.g., sidewalk) is separated from street-level parking by stairs, would a ramp connecting the two levels need to comply with slope criteria?

Yes. All running slopes and cross slopes for this type of ramp must conform to ADA criteria. Ramp criteria (e.g., handrails, level landings) applies for running slopes greater than 5% (1:20) and up to and including 8.3% (1:12). Ramp running slopes must not exceed 8.3% (1:12).

3.5 Are deficient curb ramps required to be reconstructed during a RRR project?

Deficient curb ramps must be corrected within RRR projects.

AMERICANS WITH DISABILITIES ACT (ADA)
FREQUENTLY ASKED QUESTIONS
(Revised May 2021)

Detectable Warnings

4.1 What is the purpose of the detectable warning surface (DWS)?
Detectable warning surfaces are used at the junction of a pedestrian facility (e.g., sidewalk, shared-use path) and a vehicular way (e.g., street, roadway, driveway). It provides an “edge cue” for people who are blind or have low vision to identify where the sidewalk meets the roadway edge.

4.2 Where are DWS required?
DWS are required on sidewalks at the following locations (Per FDM 222.3):

- Curb ramps and transition areas at street crossings
- Pedestrian refuge islands where there is one or more of the following:
  - Change in surface texture
  - Change in elevation (e.g., curb ramp)
  - Change in horizontal alignment of the path within the refuge island
  - Two-stage crossings
- Pedestrian at-grade railroad crossings
- Commercial driveways with a stop sign, yield sign, or traffic signal
- Boarding and alighting areas adjacent to the roadway at bus stops where there is an at-grade connection to the roadway
- Edges of railroad boarding platforms not protected by screens or guards

4.3 What are the requirements for DWS?
DWS must include a rectilinear pattern of “truncated domes” meeting the following criteria (per ADASTF 705):

- Base diameter of 0.9 inch minimum and 1.4 inch maximum, a top diameter of 50 percent of the base diameter min. to 65 percent of the base diameter max., and a height of 0.2 inch.
- Center-to-center spacing of 1.6 inch minimum and 2.4 inch maximum, and a base-to-base spacing of 0.65 inch minimum, measured between the most adjacent domes on a square grid.
• Contrast visually with adjacent walking surfaces: Either light-on-dark or dark-on-light.

See requirements in the FDM 222.3, SP 522-002, and Spec 527 for projects on the State Highway System (SHS). The FDOT Approved Products List (APL) provides a list of manufacturers of DWS products for new construction and alterations (retrofit) installations.

4.4 Are truncated domes the only acceptable DWS?

New construction and alterations must use the current standard truncated domes of a color that contrasts with the underlying walking surface. However, it is not expected that older DWS be replaced unless the surface is no longer tactile (detectable by cane or underfoot).

4.5 Is there a maximum distance from back of curb for placement of the DWS?

Ideal placement for the DWS is at back of curb. Where that is not possible, the DWS must be placed within 5 feet of back of curb. See SP 522-002. This relates to the overall crossing distance. Orientation and Mobility Specialists train those with a sight impairment to wait behind the DWS, while a pedestrian without sight impairment will naturally wait closer to the back of curb.

4.6 What is the preferred installation method for DWS – glue or screws?

Product installation must be according to manufacturer’s recommendations and the requirements of Spec 527.

4.7 What colors are permitted for DWS?

Safety yellow, brick red, or black may be used on concrete walking surfaces. Only safety yellow is permitted on asphalt walking surfaces. See Spec 527.

4.8 Are DWS required at residential driveways? What about flared commercial driveways with significant traffic volumes?

DWS should not be placed where sidewalk intersects urban flared driveways or on sidewalks that run continuously through residential driveways. DWS must be placed at commercial driveways with a stop sign, yield sign, or traffic signal. See FDM 222.3 and SP Index 522-002 for additional requirements.
4.9 What are the requirements for the orientation/alignment of the truncated domes relative to the direction of pedestrian travel?

While it is a “good practice” to orient the truncated domes with the direction of travel, it is not required by the ADA unless they are placed on a ramp with a running slope greater than 5%. Then they must align with the direction of travel so that the wheels on a chair can more easily pass through.

4.10 Are deficient DWS required to be replaced during a RRR project?

Deficient or missing DWS must be corrected within RRR projects. Preferably, DWS replacement should occur as soon as deficiencies are identified.

Pedestrian Crossings

5.1 What are the requirements for pedestrian crossings?

The maximum cross slope for crosswalks is generally 2%. For crosswalks located at signalized intersections or driveways, cross slope may exceed 2% but not greater than 5%. See FDM 222.2.3 for additional requirements. Crosswalk cross slope may follow the roadway profile for midblock crossings, but it is preferred to not exceed 5%.

Pavement markings for pedestrian crossings must comply with SP Index 711-001.

5.2 What accessibility features are required at modern roundabouts?

The primary concern at a roundabout is accommodating pedestrians who are blind or have low vision. They may have problems locating the crossing, aligning with the crossing direction, and may not easily distinguish gaps in traffic in the rotary roadway.

- For single-lane roundabouts, no special pedestrian treatments are required. Use common pedestrian features: curb ramps, DWS, splitter islands, and pavement markings.
- For multi-lane roundabouts, pedestrian-activated controls such as pedestrian hybrid beacons (HAWKS) or rectangular rapid-flashing beacons (RRFBs) should be considered in addition to the common pedestrian features.
Accessible Pedestrian Signals (APS)

6.1 What is an Accessible Pedestrian Signal (APS)?

An APS is a pedestrian signal with additional non-visual information to provide people who are blind or have low vision with the information required to know when to cross. APS include audible and vibro-tactile features during the various phases of the signal cycle.

6.2 Are APS required?

Where pedestrian facilities are provided, FDM 232.6.1 requires that provisions (e.g., conduit, conductors, signal cables) needed for future use of APS devices be provided on all new and reconstructed (altered) signalized intersections and signalized crossing locations.

See also the FDOT Traffic Engineering Manual (TEM) Section 3.7 for the procedure to request an APS.

Driveways

7.1 What are the requirements for sidewalk crossings of driveways?

Where sidewalks cross driveways, a minimum 4’ wide portion of the driveway crossing surface must have a 2% maximum cross slope and connect to the sidewalk on either side of the driveway. See SP Indices 522-001, 522-003, and 330-001; and, the FDM 214.

7.2 Are deficient driveway crossings required to be reconstructed during a RRR project?

For RRR projects, unaltered driveways that are not in compliance with ADA requirements are not required to be reconstructed. See FDM 222.2.2.1.
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(Revised May 2021)

See historical guidance and clarifications to existing requirements from the Federal Highway Administration (FHWA) – Florida Division:

Bus Stops

8.1 When are bus stops required to be accessible?

A bus stop with no amenities (i.e., only a sign on a post) needs only to be located on a pedestrian access route within a public right of way or an accessible route on a site or facility.

When amenities are provided, the bust stop must be “readily accessible to and useable by persons with disabilities” by inclusion of the following features:

- **Boarding and Alighting (B&A) Area:** This is a “firm, stable, and slip-resistant” surface (e.g., generally concrete or asphalt) that is at least 5 feet wide (parallel to the roadway) and 8 feet long (perpendicular to the roadway). The B&A Area must connect to a pedestrian access route or accessible route. The B&A Area should be located at an elevation at least 5 inches to 6 inches above the adjacent roadway surface for compatibility with ramps deployed by buses. The surface of the B&A Area may follow the roadway profile or curb (parallel to the roadway) and must be no greater than 2% (perpendicular to the roadway).

- **Bench:** A bench must connect to a pedestrian access route and have a 30-inch x 48-inch clear space at one end of the bench. The bench must provide at least 48 inches of unobstructed clear width on the pedestrian access route. A bench must not be placed within the B&A Area.

- **Shelter:** A bus shelter must be on a pedestrian access route, have a 30-inch x 48-inch clear space inside the shelter and must connect to the B&A Area by a pedestrian access route. The shelter must provide at least 48 inches of unobstructed clear width on the pedestrian access route.
• Accessibility is also required at all other common pedestrian amenities (e.g., water fountains, waste receptacles, ticket kiosks/dispensers).

The *Transit Handbook* describes how to provide accessible transit facilities.

**Utilities**

9.1 How are utilities addressed within or adjacent to a sidewalk?

Aboveground utilities are governed by the FDOT *Utilities Accommodation Manual (UAM)*, which is adopted by Rule 120 of the *Florida Administrative Code (F.A.C.)*. Identical provisions are included in *FDM 222*:

Provide the following minimum unobstructed sidewalk width (excluding the width of the curb) when there is no practical alternative to placing a pole within the sidewalk:

• 36 inches for aboveground utilities. This 36 inch width may be reduced to 32 inches, not exceeding 24 inches in length, when there is no practical alternative available to avoid an obstruction.
• 48 inches for signal, light, sign poles

**Electric Vehicle Charging Stations (EVCS)**

There are currently no national or state accessibility criteria specifically packaged to address EVCS. However, current federal and state criteria can be applied to specific elements of an EVCS where accessibility is intended.
10.1 What are the dimensions of an accessible EVCS parking stall?

Use the same dimensions as for typical accessible parking stalls: 12-feet wide x 18-feet long with an adjacent 5-foot-wide access aisle. See SP Index 711-001 (Sheet 12 of 13).

10.2 What is the unobstructed width of the accessible route around and leading to the EVCS?

The minimum unobstructed width of the accessible route is 5 feet. The accessible route is typically a standard sidewalk. See FDM 222.2.1.1.

10.3 What is the allowable surface slope for accessible routes and the EVCS parking stall?

For accessible routes, use the same requirements used for pedestrian access routes (e.g., sidewalk): 5% (1:20) maximum running slope and 2% (1:48) maximum cross slope. See FDM 222.2.1.3.

For accessible parking stalls, use the same requirements used for typical accessible parking stalls: 2% (1:48) maximum surface slope in all directions. See SP Index 711-001 (Sheet 12 of 13).

10.4 What maneuverable area (clear ground space) is required adjacent to the EVCS equipment?

Provide a landing that provides a clear 30-inch x 48-inch area directly in front of the equipment to allow persons using a wheeled mobility device to actuate the controls while remaining stationary. Horizontally center the 48-inch dimension on the controls. (Similar to pedestrian pushbuttons. See FDM 222.2.)

10.5 Are curb ramps required at an EVCS?

Yes. Curb ramps are required where curbs present a barrier to access to all walking surfaces immediately surrounding an accessible parking stall. (See question 3.2 for curb ramp requirements.)

10.6 What are the dimensions of the access aisle beside the EVCS parking stall?

Use the same dimensions as for the access aisles for typical accessible parking stalls: 5 feet. (See SP Index 711-001 (Sheet 12 of 13).)
10.7 How many accessible EVCS parking stalls should be provided?

A minimum of one accessible parking stall should be provided. See ADASAD §228.