Curb ramps, landings, and detectable warning tiles

Definition

Wheelchair ramps create a smooth, navigable transition from sidewalk level to roadway level, defined by a maximum slope angle. Landings are areas at the top of a ramp where a wheelchair can stop and turn. Detectable warning tiles are textured surfaces along pedestrian routes to notify visually impaired pedestrians that they are entering or leaving a roadway or other motor vehicle travel way.

Objective

To provide access between the sidewalk and roadway for people using wheelchairs or strollers, and for pedestrians with mobility impairments who may have trouble negotiating curbs.

Advantage

Provides accessible transition between pedestrian ways and street crossings.

'Channelizes' pedestrian movements and orients visually impaired pedestrians in the correct direction for crossing within a marked crosswalk.

Emphasizes the presence of and the need to expect pedestrians in the area.

Challenge

May require additional ROW or other roadway or roadside modifications.

Maintenance, snow removal on truncated dome tiles may be difficult and add cost.

Resources

Public Rights-of-Way Accessibility Guidelines (PROWAG) http://www.access-board.gov/prowac/nprm.htm (See Chapters R303, R304, and R305).

ADA Best Practices Tool Kit for State and Local Governments http://www.ada.gov/pcatoolkit/toolkitmain.htm (See Chapter 6).

FHWA Designing Sidewalks and Trails for Access: Part II Best Practices Design Guide http://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/sidewalk2/sidewalks207.cfm (Chapter 7).

Pedestrian and Bicycle Information Center—Curb Ramps http://www.walkinginfo.org/engineering/roadway-ramps.cfm.

ADAAG Requirements for Detectable Warnings http://www.access-board.gov/adaag/dws/update.htm.

Images (clockwise from main image):

Example of a curb extension.
Source: Dan Burden, pedbikeimages.org.

Additional examples:
Sources: Dan Burden; Dan Burden, pedbikeimages.org; Dan Burden; Carl Sundstrom, pedbikeimages.org.