DISABILITY AND COMMUNICATION ACCESS BOARD

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INTERPRETIVE OPINION

Pursuant to §103-50, Hawaii Revised Statutes (HRS), all public buildings, facilities and sites constructed by, or on behalf of the State or any county, shall conform to the 2004 Americans with Disabilities Act Accessibility Guidelines (2004 ADAAG) and amendments. In accordance to HRS §103-50 and Chapter 11-216, Hawaii Administrative Rules, the Disability and Communication Access Board has authority to issue interpretive opinions to HRS §103-50 design standards.

Docket: **DCAB 2011-07: ADAAG section 406 does not address perpendicular or parallel curb ramps. What are the technical provisions for perpendicular and parallel curb ramps?**

Summary: The ADAAG defines a curb ramp and provides technical provisions for a curb ramp. It does not however, address items in the public right-of-way (PROW). DCAB reviews numerous projects that involve the PROW and curb ramps; these projects are required to be accessible per HRS §103-50. Within the PROW, perpendicular and parallel curb ramps are common; they occur at intersections of streets and pedestrian walkways. A perpendicular curb ramp is a curb ramp that is perpendicular to the curb it cuts into. A parallel curb ramp runs parallel to the sidewalk.

The DOJ Title II regulations state: "*streets, roads, and highways must contain curb ramps or other sloped areas at any intersection having curbs or other barriers to entry from a street level pedestrian walkway*."

Where guidelines have been developed but have not yet been adopted as a standard, the DOJ has advised that these guidelines can be used as best practice. The U.S. Access Board is the federal agency responsible for researching and developing minimum standards for accessibility; it is their guidelines that the various federal agencies later adopt as standards. The U.S. Access Board's Draft Public Rights-of-Way Accessibility Guidelines (PROWAG) should be used as best practice where there are not provisions within the 2004 ADAAG for curb ramps.

Ruling: For buildings or facilities subject to HRS §103-50,

ADAAG Section 406 Curb Ramps

For curb ramps required by the 's Title II regulations and subject to HRS §103-50 that occur within the public right-of-way, in addition to ADAAG Section 406 Curb Ramps, they shall also comply with the following:

1) Perpendicular Curb Ramps. Perpendicular curb ramps shall have a running slope that cuts through or is built up to the curb at right angles or meets the gutter grade break at right angles.

- **a) Running Slope.** The running slope shall be 5 percent minimum and 8.3 percent maximum but shall not require the ramp length to exceed 15.0 ft.
- **b) Cross Slope.** The cross slope at intersections shall be 2 percent maximum. The cross slope at mid-block crossings shall be permitted to be warped to meet street or highway grade.
- **c) Landing.** A 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 mid-block crossings shall be permitted to be warped to meet street or highway grade.
- **d) Flares.** Flared sides with a slope of 10 percent maximum, measured parallel to the curb line, shall be provided where a pedestrian circulation path crosses the curb ramp.
- **e) Grade Breaks.** Grade breaks at the top and bottom of perpendicular curb ramps shall be perpendicular to the direction of ramp run. At least one end of the bottom grade break shall be at the back of curb. Grade breaks shall not be permitted on the surface of curb ramps, blended transitions, landings, and gutter areas within the pedestrian access route. Surface slopes that meet at grade breaks shall be flush.

2) Parallel Curb Ramps. Parallel curb ramps shall have a running slope that is in-line with the direction of sidewalk travel.

- **a) Running Slope.** The running slope shall be 5 percent minimum and 8.3 percent maximum but shall not require the ramp length to exceed 15.0 ft.
- **b) Cross Slope.** The cross slope shall be 2 percent maximum.
- **c) Landing.** A landing shall be provided at the bottom of the ramp run and shall be permitted to overlap other landings and clear floor or ground space. Running slope and cross slopes at intersections shall be 2 percent maximum. Running and cross slope at mid-block crossings shall be permitted to be warped to meet street or highway grade.
- **d) Diverging Sidewalks.** Where a parallel curb ramp does not occupy the entire width of a sidewalk, drop-offs at diverging segments shall be protected.

3) Blended Transitions. Running slope shall be 5 percent maximum and cross slope shall be 2 percent maximum.

4) Grade Breaks. Grade breaks shall not be permitted on the surface of curb ramps, blended transitions, landings, and gutter areas within the pedestrian access route. Surface slopes that meet at grade breaks shall be flush.

[Rul: 01/21/2016] (Auth and Imp: HRS §103-50)

If you have any questions or comments regarding this ruling, please call us at 586-8121.

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