State Of Alaska Department of Transportation and Public Facilities

ADA Curb Ramp Survey Instructions

Equipment

- 2' Smart level
- Tape measure
- Broom
- Blank curb ramp recording forms (1 per curb ramp)

Definitions

Cross Slope: The grade that is perpendicular to the direction of pedestrian travel.

Pedestrian Access Route: A continuous and unobstructed path of travel provided for pedestrians with disabilities within or coinciding with a pedestrian circulation path. In regards to these instructions, it consists of the path a pedestrian follows to use the curb ramp.

For a Perpendicular Ramp: Includes the landing, ramp, detectible warning tiles, curb and gutter, and clear space. It typically does not include the flares.

For a Parallel Ramp: Includes the ramps, landing, detectible warning tiles, curb and gutter, and clear space.

For a Directional Curb Ramp: Includes the landing(s), ramp, detectable warning tiles, curb and gutter, and clear space.

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

Curb Ramp: A short ramp cutting through a curb or built up to it. Curb ramps can be perpendicular or parallel, or a combination of parallel and perpendicular ramps.

Running Slope: The grade that is parallel to the direction of pedestrian travel.

Vertical Surface Discontinuities: Vertical differences in level between two adjacent surfaces.

Procedure

- 1. Calibrate smart level per manufacturer's instructions.
- 2. Sweep surface, removing any rock or loose material that may affect measurements.
- 3. Visually inspect area for inconsistencies. Measurements should be representative of entire area being surveyed.
- 4. Follow measurement guidelines as laid out in the *ADA Accessibility Survey Instructions: Curb Ramps* reference, and as amended below.
- Take one measurement for each required field in the middle of the feature. Measurements should be taken either parallel or perpendicular to the direction of travel, as shown on the recording forms.

- 6. Complete form.
- 7. Provide completed form to Project Engineer who will coordinate for region-wide end of year reporting to the Civil Rights Office.

Measurements

1. Perpendicular Curb Ramp

a. Landing Cross Slope: 2.0% max
b. Landing Running Slope: 2.0% max
c. Ramp Cross Slope: 2.0% max
d. Ramp Running Slope: 8.33% max

e. Gutter Counter Slope: 5.0% max

f. Flare Slope: 10.0% max

g. Flare Slope: 10.0% max

h. Landing/Ramp Width: 36.0" min

i. Landing Depth: 36.0" min

2. Parallel Curb Ramp

a. Ramp Running Slope: 8.33% max

b. Ramp Cross Slope: 2.0% max

c. Landing Cross Slope: 2.0% max

d. Landing Running Slope: 2.0% max

e. Ramp Running Slope: 8.33% max

f. Ramp Cross Slope: 2.0% max

g. Gutter Counter Slope: 5.0% max

h. Landing Depth: 60.0" min

i. Landing/Ramp Width: 48.0" min

3. Directional Curb Ramp

a. Landing Running Slope: 2.0% max

b. Landing Cross Slope: 2.0% max

c. Ramp Running Slope: 8.33% max

d. Ramp Cross Slope: 2.0% max

e. E1: Pedestrian Access Route Running Slope: 5.0% max

e. E₂: Lower Landing Running Slope: 2.0% max

f. Pedestrian Access Route or Lower Landing Cross Slope: 2.0% max

g. Gutter Counter Slope: 5.0% max

h. Landing/Ramp Width: 48.0" min

i. Landing Depth: 48.0" or 60.0" min

j. Distance to Back of Curb: No min or max, controls orientation of detectable warning tile

Notes:

1. The minimum and maximum values provided in the Measurement section of these instructions are absolutes as determined by the 2006 and 2010 ADA Standards, and supplemented by PROWAG as noted below. There is zero tolerance below or above those respective values.

- 2. Designs put forth in the plans and/or Standard Drawings are more conservative than the ADA Standard values identified within this document. Build to the design values whenever possible.
- 3. The measurements identified in Item #9 of the ADA Accessibility Survey Instructions: Curb Ramps do not completely align with current standards. For perpendicular ramps, flare slopes shall be 10.0% max except for the following (rare) situation:
 - a. Where an upper landing is not provided (36.0" min x 36.0" min) due to existing constraints, the flare slope shall be 8.33% max. In these instances, the flare becomes part of the Pedestrian Access Route.
- 4. All surfaces and transitions of the curb ramp that are part of the Pedestrian Circulation Path, but not the Pedestrian Access Route, shall adhere to the vertical surface discontinuity standards.
 - a. Vertical surface discontinuities shall be 0.5" maximum. Vertical surface discontinuities between 0.25" and 0.5" shall be beveled with a slope not steeper than 50%. The bevel shall be applied across the entire vertical surface discontinuity.
- 5. All surfaces and transitions of the curb ramp that are part of the Pedestrian Access Route shall be flush. Vertical surface discontinuities are not permitted.
- 6. Per Standard Drawings I-21 and I-22, ramp runs are not required to exceed 15.0'. The resulting ramp slope at a 15.0' length is acceptable, even if it exceeds 8.33%. This is a provision of PROWAG that the DOT&PF is using as a best practice.
- 7. Parallel Curb Ramps are not defined in the 2006 and 2010 ADA Standards. This is a provision of PROWAG that the DOT&PF is using as a best practice.
- 8. Directional Curb Ramps are not defined in the 2006 and 2010 ADA Standards. This is a provision of PROWAG (Perpendicular Ramps) that the DOT&PF is using as a best practice.

References

- ADA Accessibility Survey Instructions: Curb Ramps https://www.ada.gov/pcatoolkit/app1curbramps.pdf
- DOT&PF Standard Drawings
 - Curb Cut, Curb and Gutter, and Curb Ramp Details (I-20.20)
 http://www.dot.state.ak.us/stwddes/dcsprecon/assets/pdf/stddwgs/eng/i2020.pdf
 - Parallel Curb Ramp (I-21.10)
 http://www.dot.state.ak.us/stwddes/dcsprecon/assets/pdf/stddwgs/eng/i2110.pdf
 - Perpendicular Curb Ramp (I-22.10)
 http://www.dot.state.ak.us/stwddes/dcsprecon/assets/pdf/stddwgs/eng/i2210.pdf
- Americans with Disabilities Act (ADA) Standards
 https://www.access-board.gov/attachments/article/983/ADA-Standards.pdf
 - This is the current Standard adopted by the DOT&PF Includes both:

- Department of Transportation ADA Standards for Transportation Facilities (2006)
- Department of Justice ADA Standards (2010)
- Proposed Guidelines for Pedestrian Facilities in the Public Right-of-Way (PROWAG 2011)
 https://www.access-board.gov/attachments/article/743/nprm.pdf

This is considered best practice guidance by DOT&PF

PERPENDICULAR CURB RAMP

Street Name:		1	0 11 C	1 2 3	
Cross Street:					
Station/Offset:				$\bigoplus \Box$	
,				5 4	
	// /		9 8 Nor	th 6	
*/ */	// /		' Direc	tion	
Flare Ri	ight//				
				ion of ramp. tion of North.	
Zofe Zofe	%/// /	Construc	ction	ADA Standard	
/ (./	///	A		2.0% Max.	
	// -/	В		2.0% Max.	
	44/	С		2.0% Max.	
		D		8.33% Max.	
<u> </u>		Е		5.0% Max.	
		F		10.0% Max.	
		G		10.0% Max.	
		H		36.0" Min.	
// /		Ι		36.0" Min.	
 Is the curb ramp constructed Are all surfaces and transit Are ramps, landings, and gut If drainage grates are locat grate prohibit passage of a sphe 	tions of the curb ramp flush? ter lines draining properly? ded within the Pedestrian Accessere greater than 0.5" in diame	ess Route, does the eter? Are elongated	Yes Yes Yes Yes	○ No ○ No	○ N/A
openings placed so the long dime of travel? (5) Does a 24" detectable warning ramp opening and are the truncat	ng tile strip extend the full	width of the curb		○ No	
of travel?			0	O	
(6) If marked crosswalks are use lower landing wholly inside the	ed, is a 48"x48" clear space p marked crosswalk?	provided at the	O Yes	O No	○ N/A
(7) Does the curb ramp comply wi below. Explain why the ramp did improved from the pre-constructi	dn't meet compliance and how t		○ Yes	O No	
☐ Topography ☐ Struc	cture 🔲 Utilities	□ Other			
☐ I certify this curb ramp was built	. in substantial conformance to the	e plans and			
specifications.			DEPARTMEN	ATE OF ALASKA	
Printed Name:	Date(mm/dd/yyyy)		AND P	UBLIC FACILITIE	5

Version 1.0

PARALLEL CURB RAMP

Street Name:		10		1 2 3	
Cross Street:					•
Romp Left t		9	8 North Direct		
	_			on of ramp. ion of North	
	Z Z	Construc	tion	ADA Standar 8.33% Max.	
Longing Ly	Romp Right	С		2.0% Max. 2.0% Max.	
	**	E F		2.0% Max. 8.33% Max. 2.0% Max.	
Spoce		G H I		5.0% Max. 60.0" Min. 48.0" Min.	
 (1) Is the curb ramp constructed of stable, f (2) Are all surfaces and transitions of the c (3) Are ramps, landings, and gutter lines dra (4) If desirance and located within the 	urb ramp flush? ining properly?		YesYesYes	O No O No	
(4) If drainage grates are located within the grate prohibit passage of a sphere greater th openings placed so the long dimension is perp of travel?	an 0.5" in diameter? A	re elongated	O Yes	O No	O N/
(5) Does a 24" detectable warning tile strip ramp opening and are the truncated domes orie of travel?			O Yes	O No	
(6) If marked crosswalks are used, is a $48"x4$ lower landing wholly inside the marked crossw		at the	O Yes	O No	O N/
(7) Does the curb ramp comply with ADA Standa below. Explain why the ramp didn't meet comp improved from the pre-construction condition.	oliance and how the ramp		Yes	○ No	
☐ Topography ☐ Structure [Utilities C)ther			
☐ I certify this curb ramp was built in substantial specifications.	conformance to the plans a	nd	CT.	TE OF ALASKA	
Printed Name:	Date(mm/dd/yyyy)		DEPARTMEN	NTE OF ALASKA T OF TRANSPOR JBLIC FACILIT	

DIRECTIONAL CURB RAMP Street Name: ___ Cross Street: __ Station/Offset:__ North Direction CLEAR SPACE LANDING RAMP Circle location of ramp. Indicate direction of North. Construction ADA Standard 2.0% Max. ≤ 5' В 2.0% Max. С 8.33% Max. D 2.0% Max. Εı 5.0% Max. LANDING RAMP CLEAR E2 2.0% Max. $_{\pm}$ SPACE F ↓в 2.0% Max. G 5.0% Max. Н 48.0" Min. I See Note (7) J See Note (8) () Yes () No (1) Is the curb ramp constructed of stable, firm, and slip resistant materials? (2) Are all surfaces and transitions of the curb ramp flush? O No Yes (3) Are ramps, landings, and gutter lines draining properly? Yes () No (4) If drainage grates are located within the Pedestrian Access Route, does the grate prohibit passage of a sphere greater than 0.5" in diameter? Are elongated () N/A () Yes () No openings placed so the long dimension is perpendicular to the dominant direction of travel? (5) Does a 24" detectable warning tile strip extend the full width of the curb) Yes ramp opening and are the truncated domes oriented for the predominate direction of travel? (6) If marked crosswalks are used, is a 48"x48" clear space provided at the Yes N/A O No lower landing wholly inside the marked crosswalk? (7) For measurement I, is the value either (A) at least 60.0" if a constraint () Yes exists at the back of sidewalk that would inhibit turning, or (B) at least 48.0" if no constraints exists? (8) Is the detectable warning tile strip installed at a location consistent with () Yes O No the measurement J requirement? (9) Does the curb ramp comply with ADA Standards? If NO, check the reason(s) below. Explain why the ramp didn't meet compliance and how the ramp has been () No () Yes improved from the pre-constrauction condition. □ Topography ☐ Structure ☐ Utilities ☐ Other ☐ I certify this curb ramp was built in substantial conformance to the plans and STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES specifications. _____ Date(mm/dd/yyyy)___ Printed Name: ___ Version 1.0