

Types of Curb Ramps



The following slides will discuss types curb ramps found in RC-67M.

Directional Descriptions

1. Parallel Curb Ramp

2. Perpendicular Curb Ramp

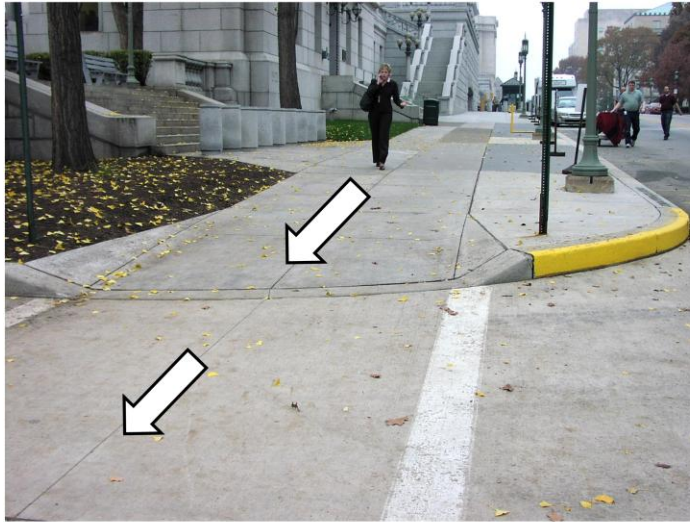
(*Diagonal* Curb Ramps)



Curb ramps can be defined by 2 directional descriptions, Parallel or Perpendicular.

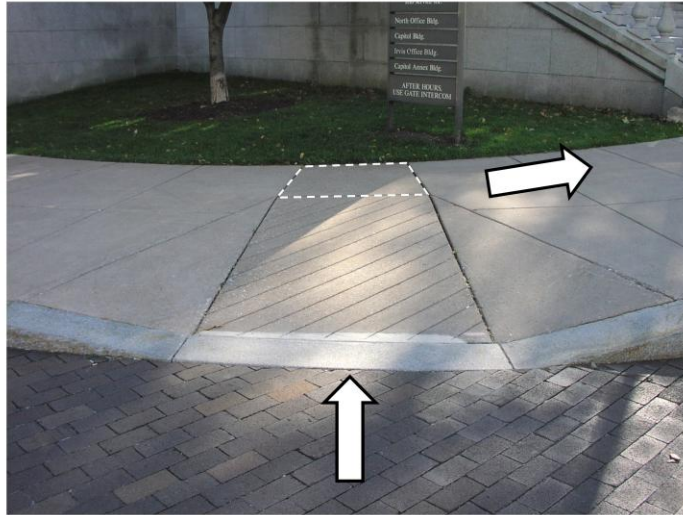
Depending on where the curb ramp is installed, both parallel and perpendicular ramps can be installed in a diagonal installation.

Parallel Curb Ramp (Curb Ramp in line with Pedestrian Path)



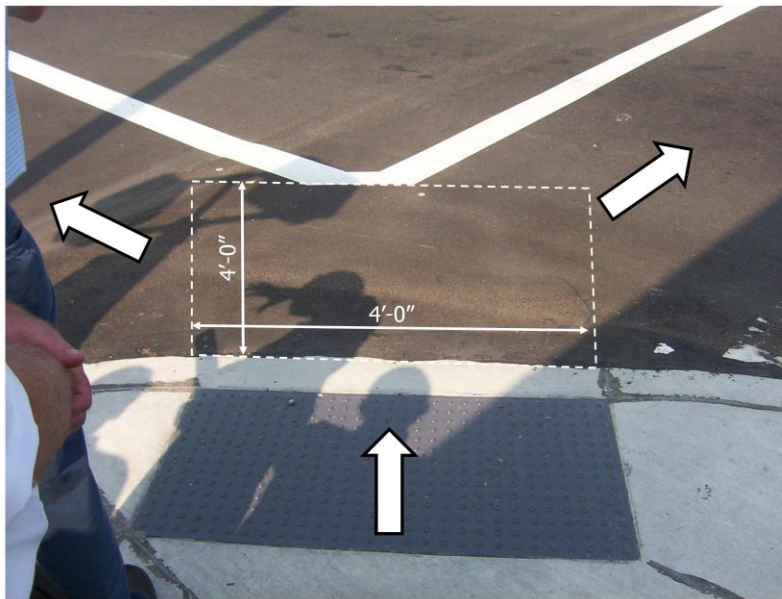
A parallel curb ramp is installed in the same direction as the pedestrian. The pedestrian does not perform a turning maneuver and therefore, a landing is not required.

Perpendicular Curb Ramp (Curb Ramp at 90° with Pedestrian Path)



A perpendicular ramp is installed perpendicular to the pedestrian path. The Pedestrian in the crosswalk will use the ramp, turn 90 degrees and then continue on the sidewalk. Since the pedestrian must turn, a landing is required.

Diagonal Curb Ramp



Diagonal ramps are single curb ramps that provide two directional crossings. This may appear as an efficient curb ramp, but in fact is the most undesirable installation.

Diagonal ramps are undesirable because:

Turning traffic may not see pedestrians.

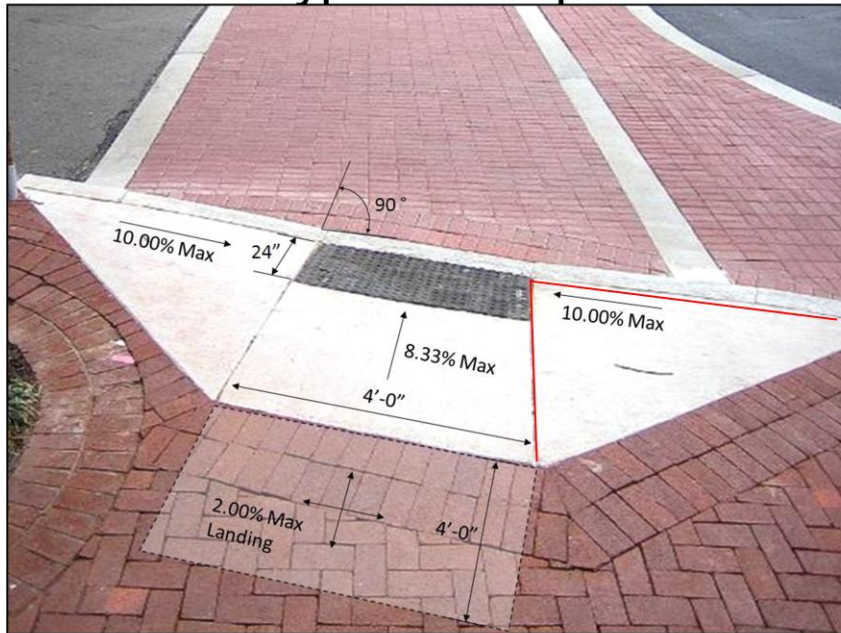
Landing requirements in the street surface are difficult to construct.

Directional cues are not provided for pedestrians with visual disabilities.

Future pedestrian push button requirements may further complicate the diagonal installation.

Approval of the ADE will be required when the turning maneuver is not entirely on the sidewalk.

Type 1 Ramp

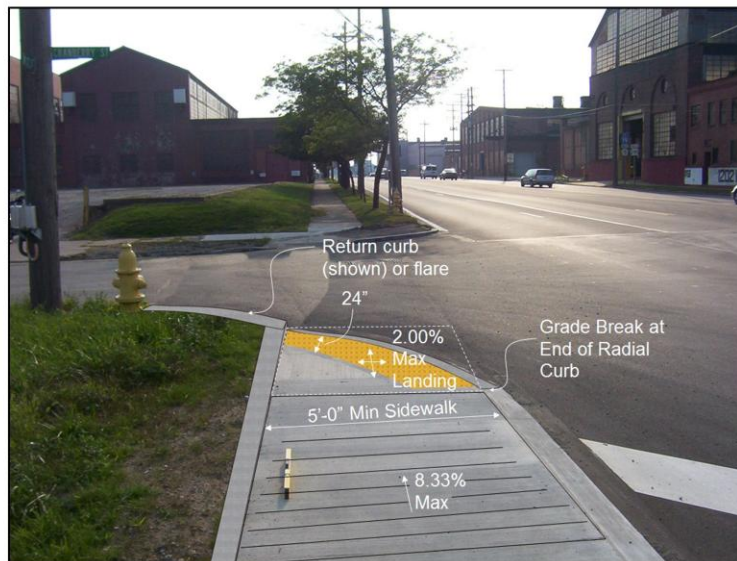


Type 1 curb ramps have been commonly used. Unfortunately, many of them have been installed incorrectly.

Type 1 curb ramps must have a landing where turns are performed, a maximum 8.33% ramp slope, 10% maximum flare slopes and be installed perpendicular to the curb. Many of these ramps were installed without a landing causing a person in a wheelchair to cross the uneven surface caused by the ramp and flares.

The other common mistake is too steep of a flare slope. If the flare is in the pedestrian path, it must be 10% or flatter. This curb ramp is ideal when installed correctly, however a wide sidewalk is required.

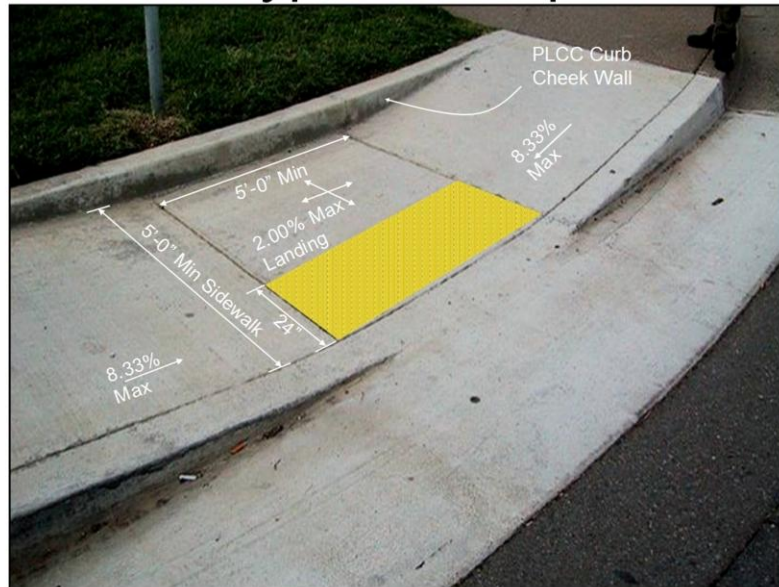
Type 1A Ramp



Type 1A curb ramps ramp the sidewalk down to a level landing. This curb ramp is commonly installed on narrow sidewalks. Truncated domes may be installed radial as shown or in a linear formation.

See RC-67M for more details on truncated dome installations.

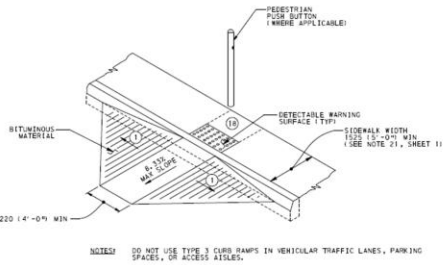
Type 2 Ramp



Type 2 curb ramps also ramp the sidewalk down to a level landing where the pedestrian would either turn to cross the street or continue up the opposite side ramp to continue on the sidewalk. This ramp is normally installed on narrow sidewalks.

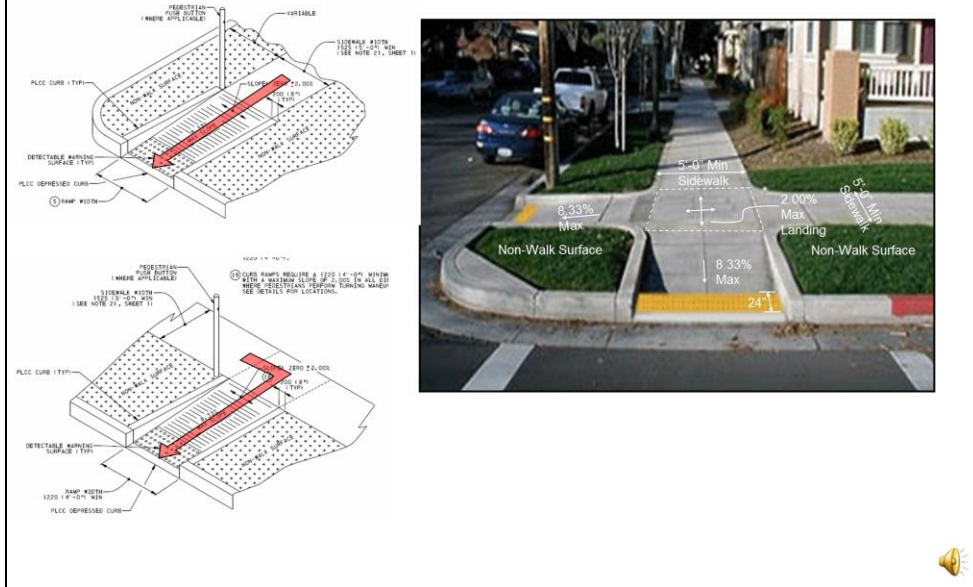
One negative aspect of this curb ramp is the pedestrian is forced to use the curb ramp even if not crossing the street.

Type 3 Ramp



Type 3 curb ramps bring the street up to the sidewalk. There is very limited applications of this type of curb ramp. Snow removal may damage this ramp and it should be considered as a last resort to other curb ramp types.

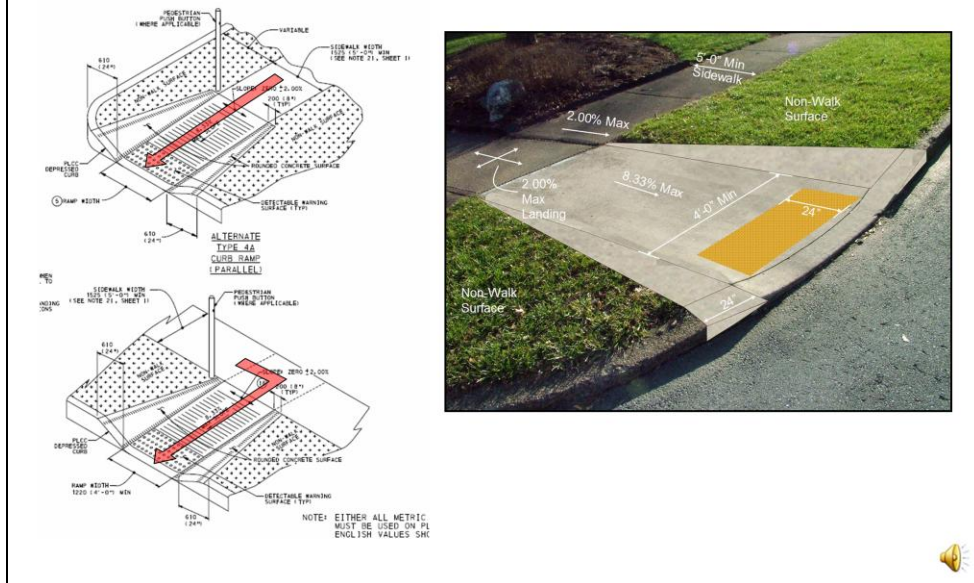
Type 4 Ramp



Type 4 curb ramps are similar to Type 1 curb ramps except instead of flares, type 4 uses a curb return. This is acceptable when the curb return is not in the pedestrian path.

As shown in the picture, the grass is separating the pedestrian zone from the curb and thus creating a furnishing zone. The graphic on the top left depicts a parallel installation. The graphic on the bottom left depicts a perpendicular installation with a landing.

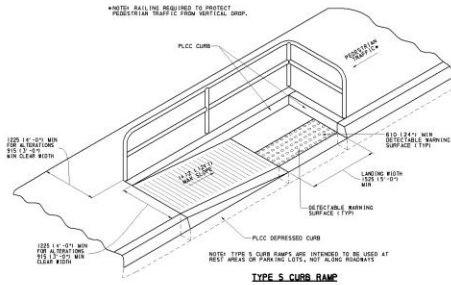
Type 4A Ramp



Type 4A curb ramps are **almost identical** to Type 1 curb ramps with a major difference. Type 4A curb ramps use a steep 24" flare. This is acceptable when the flare is not in the pedestrian path.

As shown in the picture, the grass is separating the pedestrian zone from the curb and thus creating a furnishing zone. The 24" flare may be used when the flare is adjacent to a permanent obstruction such as a street sign, that would protect the pedestrian from walking across the steep flare. The graphic on the top left depicts a parallel installation. The graphic on the bottom left depicts a perpendicular installation with a landing.

Type 5 Ramp

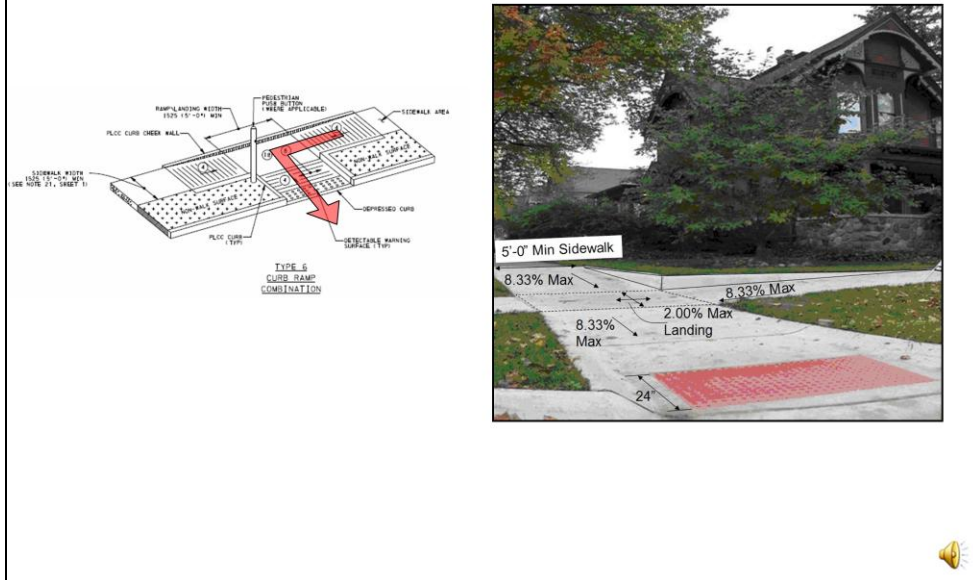


Although this type of ramp may be encountered in the field, this ramp is no longer in the Standard Drawing RC-67.



From the previous version of the RC-67M, Type 5 curb ramps used a railing. For a pedestrian with a visual disability, the railing may become an obstruction. Therefore type 5 has been removed from the standards.

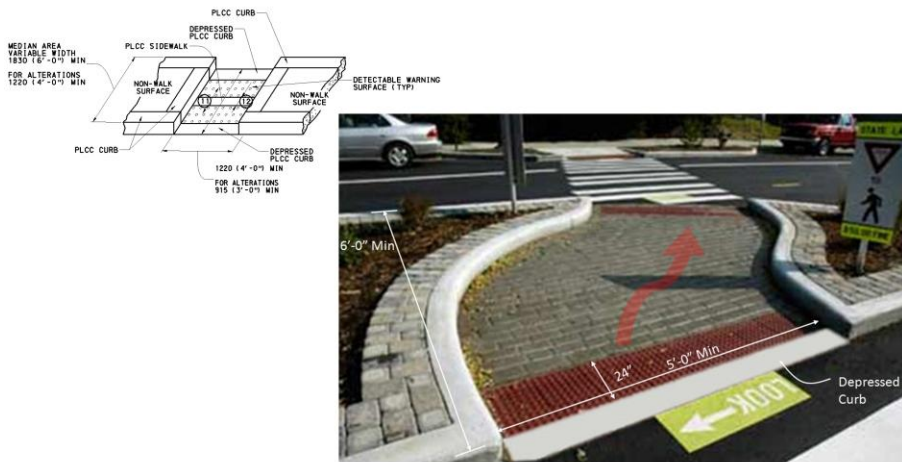
Type 6 Ramp



Type 6 curb ramps use multiple ramps with an intermediate level landing to transition the curb height. The pedestrian from the sidewalk would traverse down a ramp to a landing, make a 90 degree turn and then traverse down a second ramp to cross the street.

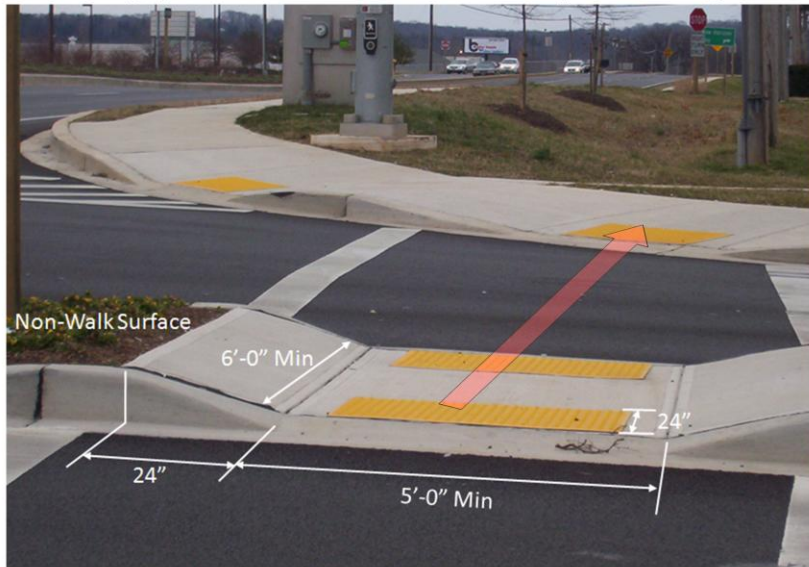
This ramp can be installed only when a furnishing zone, or grass strip, exists.

Type A Median Opening



Type A Median Openings will provide a "cut thru" for narrow raised medians. Truncated domes will be installed on both sides of the median opening behind depressed curb. The opening must be 5' to provide enough room for passing wheelchairs. The raised median shall be 6' wide to provide adequate refuge for a pedestrian in a wheelchair being pushed by another pedestrian on foot.

Type B Median Opening



Type B Median Openings are very similar to Type A. Type B uses a 24" rolled flare. This is acceptable since it is not in the pedestrian path. Again, truncated domes are located on both sides to mark the travel lanes.

Blended Transition



Blended transitions are very similar to Type 2 curb ramps, except all slopes are 5% or less.

The guidelines separate blended transitions from other curb ramps, so the RC-67M followed this practice.