

ADA Guidelines

Who's Who?

Where do you need detectable warnings?

Curb Ramps, hazardous vehicle ways, reflecting pools, and transit platform edges. See the ADAAG Standards, sections 4.7.7, 4.29, 4.29.5, 4.29.6, and 10.3.1(8).

Current Guidelines for Detectable Warnings

Excerpt from the Revised Draft Guidelines for Accessible Public Rights-of-Way (11/23/05). Please note that Advisories are for informational purposes only. (<http://www.access-board.gov/prowac/draft.htm>) [PDF Version](#)

R304 Detectable Warning Surfaces

R304.1 General. Detectable warnings shall consist of a surface of truncated domes aligned in a square or radial grid pattern and shall comply with R304.

R304.1.1 Dome Size. Truncated domes in a detectable warning surface shall have a base diameter of 23 mm (0.9 in) minimum to 36 mm (1.4 in) maximum, a top diameter of 50 percent of the base diameter minimum to 65 percent of the base diameter maximum, and a height of 5 mm (0.2 in).

Advisory R304.1.1 Dome Size. Where domes are arrayed radially, they may differ in diameter within the ranges specified.

R304.1.2 Dome Spacing. Truncated domes in a detectable warning surface shall have a center-to-center spacing of 41 mm (1.6 in) minimum and 61 mm (2.4 in) maximum, and a base-to-base spacing of 17 mm (0.65 in) minimum, measured between the most adjacent domes.

Advisory R304.1.2 Dome Spacing. Where domes are arrayed radially, they may differ in center-to-center spacing within the range specified.

R304.1.3 Contrast. Detectable warning surfaces shall contrast visually with adjacent gutter, street or highway, or walkway surfaces, either light-on-dark or dark-on-light.

Advisory R304.1.3 Contrast. Contrast may be provided on the full ramp surface but should not extend to the flared sides. Many pedestrians use the visual contrast at the toe of the ramp to locate the curb ramp opening from the other side of the street.

R304.1.4 Size. Detectable warning surfaces shall extend 610 mm (24 in) minimum in the direction of travel and the full width of the curb ramp (exclusive of flares), the landing, or the blended transition.

R304.2 Location and Alignment

R304.2.1 Perpendicular Curb Ramps. Where both ends of the bottom grade break complying with R303.3.4 are 1.5 m (5.0 ft) or less from the back of curb, the detectable warning shall be located on the ramp surface at the bottom grade break. Where either end of the bottom grade break is more than 1.5 m (5.0 ft) from the back of curb, the detectable warning shall be located on the lower landing.

Advisory R304.2.1 Perpendicular Curb Ramps. Detectable warnings are intended to provide a tactile equivalent underfoot of the visible curbline; those placed too far from the street edge because of a large curb radius may compromise effective crossing analysis.

R304.2.2 Landings and Blended Transitions. The detectable warning shall be located on the landing or blended transition at the back of curb.

R304.2.3 Alignment. The rows of truncated domes in a detectable warning surface shall be aligned to be perpendicular or radial to the grade break between the ramp, landing, or blended transition and the street.

Advisory R304.2.3 Alignment. Where a ramp, landing, or blended transition provides access to the street continuously around a corner, the vertical rows of truncated domes in a detectable warning surface should be aligned to be perpendicular or radial to the grade break between the ramp and the street for a 1.2 meter-wide (4.0 ft) width for each crosswalk served.

R304.2.3 Rail Crossings. The detectable warning surface shall be located so that the edge nearest the rail crossing is 1.8 m (6 ft) minimum and 4.6 m (15 ft) maximum from the centerline of the nearest rail. The rows of truncated domes in a detectable warning surface shall be aligned to be parallel with the direction of wheelchair travel.

The Department of Justice (DOJ)

The lead agency that oversees the Americans with Disabilities Act (ADA)(1990).

The U.S. Access Board

They develop the minimum design standards for complying with the ADA. They are responsible for creating ADAAG requirements.

The Department of Transportation (DOT)

They are the designated agency responsible for enforcing the standards and implementing regulations of the ADA's Title II (State and Local Government Services).

The Federal Highway Administration (FHWA)

They are the enforcement authority for overseeing pedestrian discrimination issues under the Title II implementing regulations.

What are all those Acronyms?

ADA: Americans with Disabilities Act

ADAAG: Americans with Disabilities Act Accessibility Guidelines

PROWAC: Public Rights-of-Way Accessibility Committee

The History of Requirements:

1991: Detectable Warning Surfaces were first required with the release of the Americans with Disabilities Act Accessibility Guidelines. Detectable Warnings were required on hazardous vehicle ways, transit platform edges, and curb ramps.

1994-2001: A suspension was placed on the requirements with the exception of transit platforms so that research could be conducted regarding the detectability of the varying tactile surfaces such as grooves, striations, and exposed aggregate. The research found that those surfaces were in fact not detectable due to the similarities to normal surface defects found on sidewalks and roadways.

July 26th, 2001: The suspension described above was allowed to expire, and detectable warnings as outlined in ADAAG were again required.

2001-Present: There have been several advisories and changes added to the requirements. The most recent is the one found above.

Also visit these links for more information:

Access Board Links:

[ADAAG Standards](#)

[1108 Detectable Warning Surfaces](#)

[Detectable Warnings \[4.7.7\]](#)

[ADAAG Requirements for Detectable Warnings \(March 2003\)](#)