

California Department of General Services · Division of the State Architect · Interpretation of Regulations Document

**DETECTABLE WARNINGS**

**IR 11B-4**

Discipline: Access Compliance Revised 12-08-05  
 References: California Building Code Sections: 1117A.4.5 and 112 7B.5 Items 3 & 5 Issued 01-26-05  
 California Government Code Section 4451(d) & (f). See IR 11B-3  
 Americans with Disabilities Act Standards for Accessible Design Section 4.7.2

This Interpretation of Regulation (IR) is intended for use by the Division of the State Architect (DSA) staff, and as a resource for design professionals, to promote more uniform statewide criteria for plan review and construction inspection of projects within the jurisdiction of DSA. This IR indicates an acceptable method for achieving compliance with applicable codes and regulations, although other methods proposed by design professionals may be considered by DSA.

This IR is reviewed on a regular basis and is subject to revision at any time. Please check the DSA web site for currently effective IR's. Only IR's listed in the document at [http://www.dsa.dgs.ca.gov/UniversalDesign/ud\\_accessmanual.htm](http://www.dsa.dgs.ca.gov/UniversalDesign/ud_accessmanual.htm) (click on "Interpretations of Regulations") at the time of plan submittal to DSA are considered applicable.

**Purpose:** This interpretation clarifies acceptable alternative design and installation requirements for detectable warnings under Division of the State Architect (DSA) jurisdiction, which includes state-funded buildings and facilities, State of California public elementary and secondary schools (grades K-12), community colleges and universities.

**General:** The California Building Code indicates technical criteria for detectable warning surfaces (truncated domes). The technical criteria include dome pattern, dome spacing and dimensional placement.

The U.S. Access Board develops the minimum design standards for complying with the ADA, and has also developed and considered detailed research studies regarding pedestrians and the use of detectable warning surfaces. Under the Access Board, the Public Rights-of-Way Access Advisory Committee was established in 1999 to develop additional ADAAG provisions. The advisory committee reached agreement on recommended accessibility standards for new and altered public rights-of-way covered by the ADA. The standards proposed by the committee were presented in a report titled Building a True Community. The draft guidelines issued by the Access Board, consistent with the advisory committee's recommendations, include revised technical criteria for detectable warnings.

The U.S. Department of Transportation (USDOT) is a designated agency responsible for enforcing the standards and implementing regulations of the ADA Title II (State and Local Government Services). The Federal Highway Administration (FHWA), under the USDOT, is the enforcement authority for overseeing pedestrian discrimination issues under the Title II implementing regulations. Both FHWA and the Access Board are encouraging the use of the new technical criteria for detectable warnings over the original ADA design standard.

**Acceptable Alternative Designs:** The Division of the State Architect (DSA) recognizes the federal research effort and that the new technical criteria provide substantially equivalent or greater access and usability as modified and specifically indicated below.

Regarding the dome pattern and dome spacing for detectable warnings, the DSA will accept, as an acceptable alternative design, detectable warning surfaces that comply with all of the following:

1. **Pattern: Detectable warnings consisting of a surface with truncated domes that are aligned in a square grid (in-line) pattern.**

**2. Dome Spacing: Truncated domes aligned in a square grid (in-line) pattern shall have a center-to-center spacing of 1.67 inches (42.4 mm) to 2.35 inches (59.7 mm).**

In addition to the above criteria regarding detectable warning design, the DSA will accept, as an acceptable alternative design, dimensional placement of detectable warning surfaces at curb ramps that comply with the following criteria:

3. Dimensional Placement at Curb Ramps: The detectable warning surface shall extend 36 inches (914.4 mm) minimum in the direction of travel for the full width of the curb ramp and shall be located so that the edge nearest the curb line is 6 inches (152.4 mm) minimum and 8 inches (203.2 mm) maximum from the curb line. Curb line means a line at the face of the curb that marks the transition between the sidewalk and the gutter or roadway. For curb ramps, also see IR 11B-2 and 11B-3.