Memorandum

U.S. Department
of Transportation

Federal Highway Administration

Subject: **INFORMATION:** ADAAG Detectable Warnings (Truncated Domes)

Date: May 6, 2002

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Reply to Attn. of: HIPA-20

To: Resource Center Managers
Division Administrators
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Recently a number of questions have been raised by people from various agencies concerning the use of detectable warnings, specifically truncated domes, when constructing or altering curb ramps. Truncated domes are the standard design requirement for detectable warnings for determining the boundary between the sidewalk and street by people with visual disabilities.

The Department of Justice (DOJ) is the lead agency that oversees the Americans with Disabilities Act (ADA)(1990). The U.S. Access Board develops the minimum design standards for complying with the ADA. The Department of Transportation is a 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) is the enforcement authority for overseeing pedestrian discrimination issues under the Title II implementing regulations.

Detectable warnings were required in 1991 by the Americans with Disabilities Act Accessible Guideline (ADAAG) (regulatory standards) for hazardous vehicular ways, transit platform edges, and curb ramps. A suspension was placed on requiring detectable warnings at curb ramps and hazardous vehicular ways, but not for transit platform edges. The reason for the suspension was to conduct research on the performance of their detectability. The DOJ continued the suspension through July 26, 2001, which allowed 10 years for conducting research. The research determined that other designs used in place of truncated domes such as grooves, striations, and exposed aggregate, were not detectable in the sidewalk and roadway environment because of the similarities to other surface textures and defects. Truncated domes have a unique design that can be detected underfoot and with a cane, and other surfaces are not considered ADA equivalent and therefore do not comply with the ADA requirements.

The DOJ had the option of allowing the suspension to expire on July 26, 2001 or publish a Federal Register Notice to continue the suspension. They decided to let the suspension expire. Consequently, since July 26, 2001 detectable warnings are again required. FHWA is obligated to enforce the requirements, and State and local governments are required to apply the minimum design standards when constructing and altering pedestrian facilities, though we encourage higher than minimum standards where possible.

The original ADA design standard for truncated domes is found in ADAAG (4.29.2). After the research was conducted, a new design recommendation was made for the dimension and placement of the domes on curb ramps. Both FHWA and the U.S. Access Board are encouraging the use of the new design over the original. Information on the recommended design and other useful information are included in the attachment.

Attachment

Attachment

Information on Detectable Warnings (truncated domes)

Detectable warnings are an Americans with Disabilities Act (ADA) requirement in the current Americans with Disabilities Act Accessibility Guidelines (ADAAG) for the use of detecting the boundary between the sidewalk and the street. The original requirement in ADAAG was suspended for a time to conduct further research. Research was conducted, and the suspension of the requirement was lifted on July 26, 2001, and are now required when constructing and altering curb ramps. Truncated domes are the only detectable warnings allowed by ADAAG. Grooves, exposed aggregate, and other designs intended for use as detectable warning are too similar to pavement textures, cracks and joints and are not considered equivalent facilitation. Truncated domes are a unique design and have proven to be the most detectable surface.

Where to find information on detectable warnings:

Where to find the regulation on the suspension and requirement:

The US Department of Justice website, www.usdoj.gov/crt/ada/detwarn.htm, or visit the US Access Board's website, www.access-board.gov, click on "publications," go to "facilities," go to "Detectable Warnings: Final Rule"

Where to find the design and application requirement in ADAAG:

Visit the US Access Board's website, www.access-board.gov , click on "publications," go to "facilities," go to "ADA Accessibility Guidelines (ADAAG)" –the provision is in 4.7.7 under Curb Ramps

Where to find technical information and a list of manufactures:

Visit the US Access Board's website, www.access-board.gov , click on "publications," go to "Public Rights-of-Way," go to *Detectable Warnings: Synthesis of US and International Practice*

Where to find the recommended design for curb ramps:

Visit the US Access Board's website, www.access-board.gov , click on "publications," go to "Public Rights-of-Way," go to *Building A True Community: Accessible Public Rights-of-Ways,* sections X02.5.6.2 through X02.5.7.3. After a number of years of research there is a new recommended design for detectable warning/truncated dome. Both the US Access Board and FHWA recommend the new design pattern and application over the original ADAAG design. FHWA's *Designing Sidewalks and Trails for Access, Part II, Best Practices Design Guide* has comparable information to the *Building A True Community* report. At the time the FHWA *Designing Sidewalks and Trails for Access,* went to print, the suspension had not been lifted, so the text in Chapter 6 does not mention that detectable warnings are required.