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# **Technical Bullet Series on Clay Brick Pavers**

# #3 - Truncated Dome ADA Pavers

**Abstract** – This Technical Bullet details the rules around the use of Truncated Domes to comply with ADA and Public Right Of Way (PROWAG) Guidelines.

Pine Hall Brick Truncated Dome ADA pavers comply with the ADA requirement for detectable warnings for use in the Public Right Of Way according to R304 Guidelines.

- □ Available in 2 ¼" x 4" x 8". Stock Red color. English Edge colors available as special order.
- □ Available in Heavy Vehicular 2-3/4" thickness as a special order
- Paver may be laid in a running bond or herringbone pattern.



Picture 1: Pine Hall Brick ADA Paver - Red

# R221 – Where Detectable Warning Surfaces Are Required

Detectable warning surfaces shall comply with R304.

Advisory R221 Detectable Warning Surfaces. Detectable warning surfaces are required where curb ramps, blended transitions, or landings provide a flush pedestrian connection to the street. Sidewalk crossings of residential driveways should not generally be provided with detectable warnings, since the pedestrian right-of-way continues across most driveway aprons and overuse of detectable warning surfaces should be avoided in the interests of message clarity. However, where commercial driveways are provided with traffic control devices or otherwise are permitted to operate like public streets, detectable warnings should be provided at the junction between the pedestrian route and the street.



Picture 1: Pine Hall Brick's ADA Clay Pavers

#### **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 centerto-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.

**R305.4.2 Detectable Warnings.** Medians and pedestrian refuge islands shall have detectable warnings complying with R304 at curb ramps and blended transitions. Detectable warnings at cut-through islands shall be located at the curbline in-line with the face of curb and shall be separated by a 61 cm (2.0 ft) minimum length of walkway without detectable warnings. Where the island has no curb, the detectable warning shall be located at the edge of roadway.

For a complete review, go to <u>www.access-board.gov</u>.

# **Detectable Warnings May be Retroactive**

According to a specialist at the Department of Justice, detectable warnings are required at hazardous vehicular areas for areas currently under construction and areas already constructed. For the latter areas, responsible parties will need to access the feasibility of

installing detectable warnings under a "readily achievable" standard. During the suspension period, many municipalities addressed hazardous vehicular areas by using contrasting colors and some type of texture change from the adjoining walk areas.

In those instances, changes to truncated domes may not be necessary if responsible parties can demonstrate equivalent facilitation. Equivalent facilitation is defined in the Public Rigfhts-of-Way Guidelines as:

### **R102 Equivalent Facilitation**

Nothing in these requirements prevents the use of designs, products, or technologies as alternatives to those prescribed, provided they result in substantially equivalent or greater accessibility and usability.

# **State or Local Governments May Enhance ADA Requirements**

State or local governments may add requirements to ADA guidelines in order to protect and provide for their citizenry. When conflicts between federal and local standards arise, the tougher standard shall be implemented. Designers should take special care in order to identify and understand any special provision added to an ADA requirement by a state or local authority.