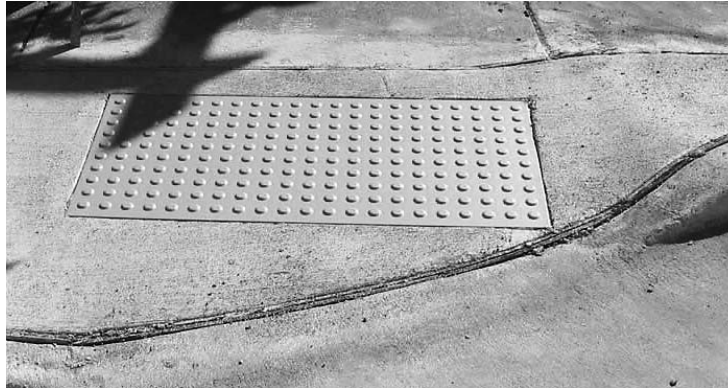


Curb ramps and detectable warnings, Round 3

HIGHER TRAFFIC volumes, right turns on red, and the trend toward aggressive driving have made it harder for visually impaired persons to cross a street safely. To assist them, the US Access Board determined that curb ramps need to have a contrasting color and a rough surface which is detectable with a cane. Truncated warning domes are now the national standard for surfaces, and WisDOT has made white or yellow the standard color in Wisconsin.

"Unfortunately the people who wrote the specs lived in a warm climate and had no product in mind when they did it," says Mark Chandler. "It's a difficult engineering problem and nothing works all over the country. Hot sun destroys the materials in the southwest; up north the snowplows rip them up." Chandler is Technology Transfer and Quality Engineer with FHWA Wisconsin Division. His overview article "Testing Truncated Domes"



MetaDome is currently the only approved warning dome for WisDOT projects.

appeared in the Sept/Oct 2004 FHWA newsletter Public Roads. (See online link at right.)

Wisconsin's DOT has been testing products as they become available. A product that looked promising after one winter was showing damage after the second year. "ArmorTile is a good product, but not one that is going to take a lot of abuse from snow removal operations," says Peter Kemp, New Products/New Methods Engineer in the WisDOT Bureau of Highway Construction.

A newer product, MetaDome, is now in production and seems to be holding up reasonably well, Kemp reports. It is a metal inset panel with a bright yellow coating. "We've seen some of the non-slip coating come loose on the top of the domes," he says. "That's easily fixed with a repair kit from the manufacturer."

A recent change in the material is expected to eliminate peeling of the coating. This has isolated coating damage to only areas with direct damage from snow removal operations, Kemp notes.

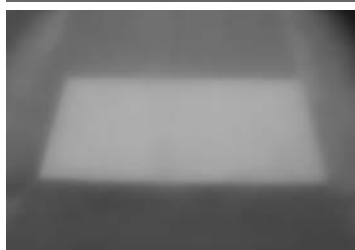
MetaDome, produced by Meta-Panel, is now the only truncated warning dome approved for use on WisDOT projects. "We're continuing to look for products that will give us the durability and performance that we require," Kemp says. Several DOTs around the country are also doing field evaluations. A summary report by the National Cooperative Highway Research Program (NCHRP) is due out this spring.

Unfortunately, local governments will be doing sidewalk construction this summer. They have to build curb ramps before the final report comes out.

"Right now the best approach is to use the product that Pete Kemp is recommending," says Mark Chandler. "Where the project involves federal money they are required to use the approved product."

Even without federal money, local governments should probably use approved products off WisDOT's Approved Product List. They are required to meet specifications under the Americans With Disabilities Act (ADA) to provide a truncated warning surface on curb ramps, he advises.

"It's a difficult engineering problem and nothing works all over the country . . . We're continuing to look for products that will give us the durability and performance that we require."



These photos taken through low-vision goggles illustrate the importance of color and contrast in ramp treatments.

Testing Truncated Domes," by Mark Chandler is on line at: www.tfhrc.gov/pubrds/04sep/10.htm or request a print copy from the TIC if you can't access it electronically.

The Approved Products List is on the WisDOT Web site. Go to: www.dot.wisconsin.gov Follow this pathway: Doing Business / Construction bid letting information / Approved Product List (right margin).

The TIC has copies of the FHWA publication, "Accessible Sidewalks." See Resources on page 6.

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