



Florida Department of Transportation Research

Performance Evaluation of No Track Thermoplastic Markings

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Thermoplastic materials are widely used in Florida for roadway traffic markings. An improved version, called “no track” thermoplastic, is available from several manufacturers. The stated benefit of no track thermoplastic is that it resists asphalt residue tracked onto it by vehicle tires and can, therefore, be installed on a freshly paved surface. The ability to mark pavement before it is cured reduces the amount of time the road must be closed to traffic.

Some no track materials, however, show evidence of asphalt tracking, which has caused the markings to discolor and lose some of their ability to reflect light. To be eligible for use in Florida, no track marking materials must meet FDOT requirements for durable color and continued ability to reflect light (reflectivity). Researchers at the University of South Florida field tested and evaluated several no track materials to determine if they meet state specifications for color and reflectivity.



White test strips show varying levels of discoloration.

The researchers installed 16 test strips on a freshly paved right turn lane on SR 24, in Gainesville, Fla. The strips consisted of three no track materials and one regular thermoplastic. They applied both yellow and white markings, using reflective glass beads on half of the stripes of each color.



Yellow test strips tend to have better reflectivity over time.

While the test strips were not completely resistant to asphalt tracking, they performed better than the regular thermoplastic. The researchers measured the color and reflectivity of the test strips and found that the yellow no track thermoplastic outperformed the yellow regular thermoplastic with respect to reflectivity. Conversely, the white no track material did not outperform the white regular thermoplastic with respect to reflectivity. The use of glass beads did not improve reflectivity for any of the materials tested. The results of this study should be useful in establishing guidelines for use of no track thermoplastic.

Project Manager: Paul Vinik, State Materials Office

Principal Investigator: John Lu, University of South Florida

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