9910100 CHANNELIZING DEVICE MATERIALS COMMENTS FROM INTERNAL/INDUSTRY REVIEW

Craig Schulz (253) 284-8005 Craig.Schulz@pexco.com

Comments: (10-11-22 Industry)

We have made this point several times about the elimination of Asphalt testing, the recommendation for Texas A&M Transportation institute even recommended this. In doing this you are disregarding that Asphalt is 90% plus of the roadways, asphalt testing is much tougher to pass. Below is an excerpt from 607532-02 Phase 2 – from Texas A&M Transportation Institute for FDOT on the difference between Asphalt and Concrete.

The first minimum performance level considers the average performance of a product attached to a concrete surface. In the previous $605601^{(2)}$ study, a minimum performance level was specified based on the test data of 6 products installed on a concrete surface. Based on the evaluation of the data, a minimum average of 150 tire impacts and a minimum average of 45 bumpers impacts resisted was specified for FDOT. Previous testing with delineators attached to a concrete surface resulted in four products meeting the specification⁽²⁾. The Pexco City Post with Hilti anchors, Pexco City Post with FIRMMarker epoxy, Safe-Hit Dura-Post with SHEPX-13-K1 epoxy, and Safe-Hit Dura-Post with lag screw anchors all met the specification. None of the products installed on a concrete surface that were tested as specified in Chapter 3 met the previous specification. TTI researchers recommend the specification for delineators attached to a concrete surface remain the same minimum average of 150 tire impacts and minimum average of 45 bumpers impacts resisted.

The second minimum performance level considers the average performance of a product attached to an asphalt surface. It is recommended that a product tested on an asphalt surface meet a minimum average of 125 tire impacts and 45 bumper impacts resisted. Four products meet this minimum recommendation for delineators attached to an asphalt surface. This includes the Safe-Hit Dura-Post with the Wedge Bolt Anchors, Safe-Hit Dura-Post with Coupling Nut and Bolt Anchors, Pexco City Post with Asphalt Anchors, and Pexco City Post with E-Bond epoxy.

At this point it is unknown the exact effects of temperature in relation to the performance of the delineator. Additional cold weather testing of products is needed to develop a relationship for the performance of the delineators versus temperature.

TR No. 607531-02 69 2018-04-04

Response: (Gevin McDaniel, P.E.)

Testing tubular markers on asphalt with open graded friction course (OGFC) would be ideal. However, we found out recently that the NTPEP testing procedure will not be including the OGFC testing. The testing facility (TTI) is having challenges with funding the construction of a new OGFC test deck (especially since Florida is the only state requesting it). In coordination with the vendors, the State Materials Office, Program Management, and Office of Design, we have made the decision to eliminate the requirements in Specification 991 for NTPEP testing on

OGFC pavements. Instead, we plan to develop testing protocols for future implementation where
the SMO will conduct better controlled shear, tension, and prying test for the bases attached to
OGFC.
