



TECHNICAL MEMORANDUM

Contract No.: 1903665
Test Report No.: 613301-01-2
Project Name: Impact Recovery Systems, Inc. OmegaPost™ 2 High Performance Delineator – TTCD-2019-01-001 – High Speed Applications
Sponsor: AASHTO National Transportation Product Evaluation Program (NTPEP)

DATE: 2019-09-30

Roadside Safety and Physical Security Division, TTI

FOR MORE INFORMATION:

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TASK REPORT:

This tech memo documents the testing of Impact Recovery Systems, Inc OmegaPost™ High Performance delineators installed on concrete and asphalt.

SUMMARY OF TESTING




The objective of the testing performed was to evaluate the durability of the Impact Recovery Systems, Inc. OmegaPost™ High Performance delineators with E-Bond epoxy attachment to concrete. The tested delineators attached to concrete resisted an overall average of 200 impacts. The delineators on concrete resisted an average of 200 tire and 200 bumper impacts. Table 2 presents a summary of the testing conducting for the Impact Recovery Systems, Inc. OmegaPost™ High Performance delineators attached to a concrete surface. All testing was performed at a nominal impact speed of 70 mph.

Concrete	Tire	Bumper
1	200	200
2	200	200
Average	200	200
Overall	200	

SUMMARY OF BUMPER VS TIRE IMPACT:

A tire impact consisted of the vehicle impacting the delineator with the centerline of the delineator aligned with the centerline of the vehicle tire. During this impact the vehicle tire traverses over the delineator. A bumper impact consisted of the vehicle impacting the delineator with the front bumper at the 1/3-point of the vehicle. The bumper and tire impacts were performed simultaneously in a single pass of the vehicle.

Summary of OmegaPost NTPEP Test Results

Table B5. Delineator #2B after Specific Runs for Test No. 613301-01-2			
Photos – Post #2B (Concrete Glue-Down)			
Run #	Reflective Sheeting	Full Post	Base or Damage
Run #200			

DESCRIPTION OF TESTS:

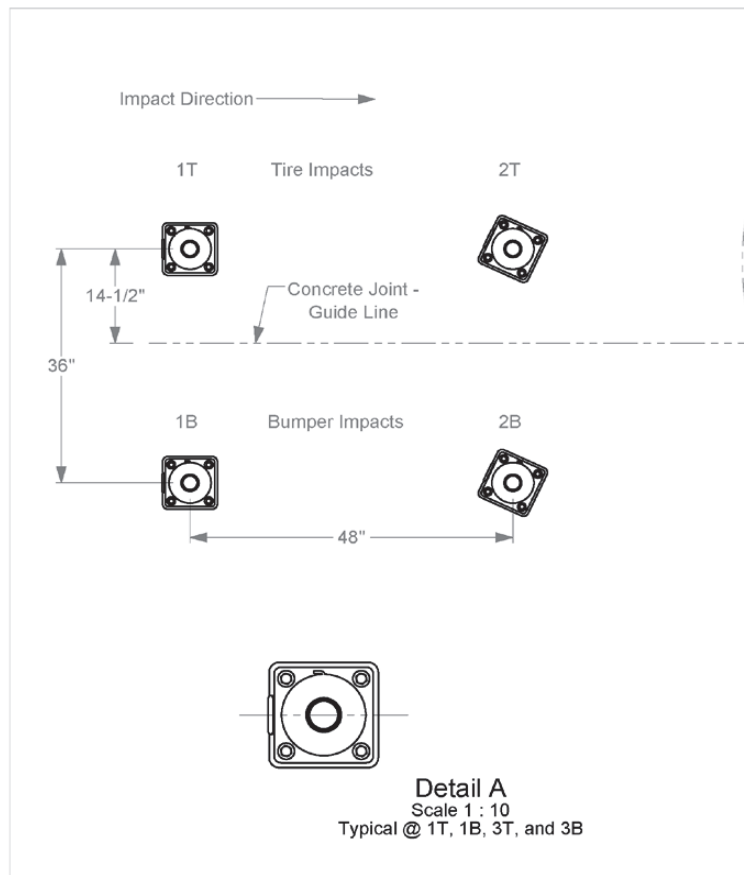
The testing was performed on September 23, 2019.

Half of the test delineators were installed to receive bumper impacts and the other half to receive tire impacts

The vehicle was traveling at a nominal speed of 70 mph. Temperature at the time of testing was above 81°F.

A delineator is deemed to have failed when it does not rebound to within 15° of vertical within 5 minutes after impact or when it fractures. In addition, a tear of more than 50% of the delineator post cross section is considered a failure.

The delineators attached to concrete with epoxy completed 200 runs with no failure.



	Delineator Post	Run Number	Failure Mode
Glue-Down on Concrete	1T	200	No failure
	1B	200	No failure
	2T	200	No failure
	2B	200	No failure