



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

1200 New Jersey Ave., SE  
Washington, D.C. 20590

April 23, 2014

In Reply Refer To:  
HSST/WZ-329

Mr. John M. Pasakarnis  
Dicke Tool Company  
1201 Warren Avenue.  
Downers Grove, Illinois 60515

Dear Mr. Pasakarnis:

This letter is in response to your request for the Federal Highway Administration (FHWA) to review modified roadside safety systems for eligibility for reimbursement under the Federal-aid highway program.

Name of systems:	TF1240, STF1240
Type of system:	X-Footprint Portable Sign Stands
Test Level:	NCHRP Report 350 Test Level 3
Testing conducted by:	N/A
Date of request:	June 26, 2013

#### **Decision**

The following devices are eligible, with details provided in the form and letter which are attached as an integral part of this letter:

- TF1240, STF1240 X-Footprint Portable Sign Stands with two-piece masts.

Based on a review of the analysis submitted by the manufacturer certifying the devices described herein meet the crash test and evaluation criteria of the National Cooperative Highway Research Program (NCHRP) Report 350, the device is eligible for reimbursement under the Federal-aid highway program. Eligibility for reimbursement under the Federal-aid highway program does not establish approval or endorsement by the FHWA for any particular purpose or use.

The FHWA, the Department of Transportation, and the United States Government do not endorse products or services and the issuance of a reimbursement eligibility letter is not an endorsement of any product or service.

### **Requirements**

To be found eligible for Federal-aid funding, roadside safety devices should meet the crash test and evaluation criteria contained in the NCHRP Report 350 or the American Association of State Highway and Transportation Officials' Manual for Assessing Safety Hardware (MASH).

### **Description**

The devices and supporting documentation are described in the attached form.

### **Summary and Standard Provisions**

Therefore, the systems described and detailed in the attached form are eligible for reimbursement and may be installed under the range of conditions tested.

Please note the following standard provisions that apply to FHWA eligibility letters:

- This finding of eligibility does not cover other structural features of the systems, nor conformity with the Manual on Uniform Traffic Control Devices.
- Any changes that may influence system conformance with NCHRP Report 350 criteria will require a new reimbursement eligibility letter.
- Should the FHWA discover that the qualification testing was flawed, that in-service performance reveals safety problems, or that the system is significantly different from the version that was crash tested, we reserve the right to modify or revoke this letter.
- You are expected to supply potential users with sufficient information on design and installation requirements to ensure proper performance.
- You are expected to certify to potential users that the hardware furnished has the same chemistry, mechanical properties, and geometry as that submitted for review, and that it will meet the crash test and evaluation criteria of the NCHRP Report 350.
- To prevent misunderstanding by others, this letter of eligibility is designated as number WZ-329 and shall not be reproduced except in full. This letter and the test documentation upon which it is based are public information. All such letters and documentation may be reviewed at our office upon request.
- This letter shall not be construed as authorization or consent by the FHWA to use, manufacture, or sell any patented system for which the applicant is not the patent holder. The FHWA does not become involved in issues concerning patent law. Patent issues, if any, are to be resolved by the applicant.
- The Dicke Tool Company portable sign stands are patented products and considered proprietary. If proprietary systems are specified by a highway agency for use on Federal-aid projects: (a) they must be supplied through competitive bidding with equally suitable unpatented items; (b) the highway agency must certify that they are essential for synchronization with the existing highway facilities or that no equally suitable alternative exists; or (c) they must be used for research or for a distinctive type of construction on relatively short sections of road for experimental purposes.

- Our regulations concerning proprietary products are contained in Title 23, Code of Federal Regulations, Section 635.411.

Sincerely yours,

A handwritten signature in blue ink that reads "Michael S. Griffith". The signature is written in a cursive style with a large, stylized "M" and "G".

Michael S. Griffith  
Director, Office of Safety Technologies  
Office of Safety

Enclosures

## Request for Federal Aid Reimbursement Eligibility Of Highway Safety Hardware

Date of Request:	February 17, 2014	<input type="radio"/> New <input checked="" type="radio"/> Resubmission
Name:	John M. Pasakarnis <i>John M. Pasakarnis</i>	
Company:	Dicke Tool Company	
Address:	1201 Warren Avenue, Downers Grove, IL	
Country:	USA	
To:	Michael S. Griffith, Director FHWA, Office of Safety Technologies	

I request the following devices be considered eligible for reimbursement under the Federal-aid highway program.

[Help](#)

System Type	Submission Type	Device Name / Variant	Testing Criterion	Test Level
'WZ': Crash Worthy Work Zone	<input checked="" type="radio"/> Physical Crash Testing <input type="radio"/> FEA & V&V Analysis	Modifications to stand models #1230 and 1008	NCHRP Report 350	TL3

By submitting this request for review and evaluation by the Federal Highway Administration, I certify that the product(s) was (were) tested in conformity with the AASHTO Manual for Assessing Safety Hardware and that the evaluation results meet the appropriate evaluation criteria in the MASH.

Identification of the individual or organization responsible for the product:

Contact Name:	John M. Pasakarnis	Same as Submitter <input checked="" type="checkbox"/>
Company Name:	Dicke Tool Company	Same as Submitter <input checked="" type="checkbox"/>
Address:	1201 Warren Avenue, Downers Grove, IL	Same as Submitter <input checked="" type="checkbox"/>
Country:	USA	Same as Submitter <input checked="" type="checkbox"/>

### PRODUCT DESCRIPTION

<p>Modification to Existing Hardware Non-Significant - Effect is positive or Inconsequential</p> <p>Acceptance of the TFI240 (aluminum legs) and STFI240 (steel legs).</p> <p>Using the basic design of the TF1230 stand (WZ-213) and STFI230 (WZ-250), the only change we are proposing is the conversion of the 3-stage mast to a 2-stage mast. The stand weight, stand footprint and sign mounting height of the new stands are identical to the TF1230 and STFI230 stands. We believe this to be a reasonable request because the key design features are almost identical to the previously accepted stands. As such, we contend that there will be no effect on the windshield impact data. Crash testing of similar stands shows similar performance between 2-stage and 3-stage masts, as per FHWA Letter WZ-213.</p>
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### CRASH TESTING

A brief description of each crash test and its result:

## Request for Federal Aid Reimbursement Eligibility Of Highway Safety Hardware

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	Name:	John M. Pasakarnis	
	Company:	Dicke Tool Company	
	Address:	1201 Warren Avenue, Downers Grove, IL	
	Country:	USA	
	To:	Michael S. Griffith, Director FHWA, Office of Safety Technologies	

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**Help**

System Type	Submission Type	Device Name / Variant	Testing Criterion	Test Level
'WZ': Crash Worthy Work Zone	<input checked="" type="radio"/> Physical Crash Testing <input type="radio"/> FEA & V&V Analysis	Modifications to stand models #1230 and 1008	NCHRP Report 350	TL3

By submitting this request for review and evaluation by the Federal Highway Administration, I certify that the product(s) was (were) tested in conformity with the AASHTO Manual for Assessing Safety Hardware and that the evaluation results meet the appropriate evaluation criteria in the MASH.

Identification of the individual or organization responsible for the product:

Contact Name:	John M. Pasakarnis	Same as Submitter <input checked="" type="checkbox"/>
Company Name:	Dicke Tool Company	Same as Submitter <input checked="" type="checkbox"/>
Address:	1201 Warren Avenue, Downers Grove, IL	Same as Submitter <input checked="" type="checkbox"/>
Country:	USA	Same as Submitter <input checked="" type="checkbox"/>

### PRODUCT DESCRIPTION

Modification to Existing Hardware Non-Significant - Effect is positive or Inconsequential
<p>Acceptance of the TF1240 (aluminum legs) and STF1240 (steel legs).</p> <p>Using the basic design of the TF1230 stand (WZ-213) and STF1230 (WZ-250), the only change we are proposing is the conversion of the 3-stage mast to a 2-stage mast. The stand weight, stand footprint and sign mounting height of the new stands are identical to the TF1230 and STF1230 stands. We believe this to be a reasonable request because the key design features are almost identical to the previously accepted stands. As such, we contend that there will be no effect on the windshield impact data. Crash testing of similar stands shows similar performance between 2-stage and 3-stage masts, as per FHWA Letter WZ-213.</p>

### CRASH TESTING

A brief description of each crash test and its result:

Required Test Number	Narrative Description	Evaluation Results
S3-70 (700C)		WAIVER REQUESTED



Required Test Number	Narrative Description	Evaluation Results
3-71 (820C)		WAIVER REQUES
S3-71 (700C)		WAIVER REQUES
3-70 (820C)		WAIVER REQUES

Full Scale Crash Testing was done in compliance with MASH by the following accredited crash test laboratory (cite the laboratory's accreditation status as noted in the crash test reports.):

Laboratory Name:	Midwest Roadside Safety Facility	
Laboratory Contact:	Ronald K. Faller	Same as Submitter <input type="checkbox"/>
Address:	University of Nebraska-Lincoln 130 Whittier Building Lincoln, Nebraska 68583-0853	Same as Submitter <input type="checkbox"/>
Country:	USA	Same as Submitter <input type="checkbox"/>
Accreditation Certificate Number and Date:	ISO/IEC 17025:2005; A2LA Certificate Number: 2937.01	

## ATTACHMENTS

Attach to this form:

- 1) A copy of the full test report, video, and a Test Data Summary Sheet for each test conducted in support of this request.
- 2) A drawing or drawings of the device(s) that conform to the Task Force-13 Drawing Specifications [\[Hardware Guide Drawing Standards\]](#). For proprietary products, a single isometric line drawing is usually acceptable to illustrate the product, with detailed specifications, intended use, and contact information provided on the reverse. Additional drawings (not in TF-13 format) showing details that are key to understanding the performance of the device should also be submitted to facilitate our review.

FHWA Official Business Only:

Eligibility Letter		AASHTO TF13	
Number	Date	Designator	Key Words
WZ-329	April 11, 2014	N/A	Portable sign Stands X-Footprint Sign Stands



# **DICKE SAFETY PRODUCTS**

1201 Warren Avenue • Downers Grove, IL 60515 • Ph: 877.891.0050 • Fax: 630.969.3973

June 26, 2013

Mr. Nick Artimovich, II  
Highway Engineer  
Federal Highway Administration  
Office of Safety Design  
1200 New Jersey Avenue, SE HSSD  
Washington, DC 20590

Dear Mr. Artimovich,

This inquiry is regarding minor modifications to two (2) previously accepted stands. The new stands have slightly different mast configurations which are intended to satisfy customer field and storage requirements. A more complete description of each request follows:

**Request #1:**

Acceptance of the TF1240 (aluminum legs) and STF1240 (steel legs).

Using the basic design of the TF1230 stand (WZ-213) and STF1230 (WZ-250), the only change we are proposing is the conversion of the 3-stage mast to a 2-stage mast. The stand weight, stand footprint and sign mounting height of the new stands are identical to the TF1230 and STF1230 stands. We believe this to be a reasonable request because the key design features are almost identical to the previously accepted stands. As such, we contend that there will be no effect on the windshield impact data. Design drawings for both are included for your reference.


**Request #2:**

Acceptance of the TF2008 (aluminum legs) and STF2008 (steel legs).

Using the basic design of the TF1008 stand and STF1008 (WZ-250), the only change we are proposing is a minor dimensional change to each half of the 2-stage mast. The extended mast height will remain basically the same. In addition, the stand weight, footprint and sign mounting height of the new stands are identical to the TF1008 and STF1008 stands. We believe this to be a reasonable request because the key design features are almost identical to the previously accepted stands. As such, we contend that there will be no effect on the windshield impact data. Design drawings for both are included for your reference.

Should you need any further documentation, please let me know.

Sincerely,

A handwritten signature in cursive script, appearing to read "John M. Pasakarnis".

John M. Pasakarnis  
Dicke Tool Company  
630-969-0050 x5209  
[john@dicketool.com](mailto:john@dicketool.com)  
[www.dicketool.com](http://www.dicketool.com)