March 30, 2012

In Reply Refer To:
SS-134B

Greg Kirchgesner
Xcessories Squared
P.O. Box 135
Auburn, Illinois 62615

Dear Mr. Kirchgesner:

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

Name of system: Xcessories Squared Redi-Torque Triangular Slip Base Top (10 3/8”) with galvanized keeper plate
Type of system: Triangular Slip Base Small Sign Support for Perforated Square Steel Tube (PSST) posts
Test Level: NCHRP Report 350 Test Level 3
Testing conducted by: N/A
Date of request: July 20, 2011

Decision:
The following devices are eligible, with details provided below

- Xcessories Squared Redi-Torque Triangular Slip Base Top (10 3/8”) with galvanized keeper plate

Based on a review of the information and calculations submitted by the manufacturer certifying the device described herein meets the crashworthiness 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
Roadside safety devices should meet the guidelines contained in the National Cooperative Highway Research Program (NCHRP) Report 350 or the American Association of State Highway and Transportation Officials’ Manual for Assessing Safety Hardware (MASH).
**Description**

For use in Texas, you requested that the Xcessories Squared triangular slip base upper portion (specifically a cast one) and the TX DOT fastener hardware (which includes their galvanized bolt keeper plate) be mounted on an existing generic slip base bottom. Since the Xcessories Squared cast slip base upper portion has the same geometry as the standard TX DOT cast slip base upper portion, you contend crashworthiness would not be affected. TX DOT’s concern was that if they installed a system that consisted of an Xcessories Squared slip base bottom, Redi-Torque hardware (which includes a Teflon washer), and an Xcessories Squared cast slip base upper portion, and it was impacted thus requiring re-installation, that one of their crews might only have standard TX DOT fastener hardware on their truck and would use it. They also wanted to be able to install an Xcessories Squared cast slip base upper portion and Redi-Torque hardware (including Teflon washers) to an existing slip base bottom if a re-installation warranted replacement of both. Since both the crash tested TX DOT slip base system and the Xcessories Squared slip base (FHWA Letter SS-134, dated May 9, 2006) systems are very similar and have similar change in velocity results, breakaway performance should not be affected when using the Xcessories Squared triangular slip base upper portion (specifically cast one) and the TX DOT fastener hardware (which includes their galvanized bolt keeper plate) on an existing slip base bottom.

**Findings**

Therefore, the systems described above and detailed in the enclosed drawings 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 is limited to the crashworthiness characteristics of the systems and does not cover their structural features, nor conformity with the Manual on Uniform Traffic Control Devices.
- Any changes that may influence the crashworthiness of the system 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 will be expected to supply potential users with sufficient information on design and installation requirements to ensure proper performance.
- You will be 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 crashworthiness requirements of the NCHRP Report 350.
- To prevent misunderstanding by others, this letter of eligibility is designated as number SS-134B 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 finding of eligibility is limited to the crashworthiness characteristics of the candidate system, and the FHWA is neither prepared nor required to become involved in issues concerning patent law. Patent issues, if any, are to be resolved by the applicant.
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Sincerely yours,

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