



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

1200 New Jersey Ave., S.E.
Washington, DC 20590

January 24, 2008

In Reply Refer To:
HSSD/WZ-269

Mr. Stephen T. Zimar
Product Manager
Eastern Metal/USA-Sign
1430 Sullivan Street
Elmira, NY 14901-1698

Dear Mr. Zimar:

In your November 15, 2007, letter you requested modifications to previously issued Federal Highway Administration (FHWA) acceptance letters of your company's crashworthy sign stands using various sign substrates for use in work zones on the National Highway System (NHS). You requested acceptance of your stand models in the X-600 Series with a sign mounting height of 7 feet above grade for use on the NHS under the provisions of National Cooperative Highway Research Program (NCHRP) Report 350, "Recommended Procedures for the Safety Performance Evaluation of Highway Features". This taller height would be identified as the X-840 Series.

The X-600 Series are currently accepted at a mounting height of 5 feet and for use with various substrates including roll-up, corrugated plastics, aluminum composites, 0.80 and 0.10 inch aluminum, and 5/8 inch plywood (see WZ-59, WZ-78A, WZ-87B, and WZ-103A). To achieve the 7 feet mounting height above grade the following changes are proposed: subtract 16 inches of aluminum tubing from the top mast, and add a third middle mast section of aluminum tube 46 inches long; replace the two vertical steel coil springs below the mast sections with vertical fiberglass springs. Adding two feet to the mast height created the need for increased stability of the sign stand. Each leg was lengthened by adding 12 inches of aluminum tubing. The aluminum bottom mast, which incorporates your previously accepted frangible coupling would remain in place within the bottom mast section, and would not be altered in any way.

Based on the crashworthy characteristics of this sign stand as previously tested, the requested additional height will not pose an increased risk to the occupant compartment or cause excessive vehicle velocity change. Therefore, we acknowledge your X-840 Series sign stands with sign mounting heights at seven feet above grade are acceptable for use on the NHS when selected by the contracting authority.



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

- Our acceptance is limited to the crashworthiness characteristics of the devices and does not cover their structural features, nor conformity with the Manual on Uniform Traffic Control Devices.
- Any changes that may adversely influence the crashworthiness of the device will require a new acceptance letter.
- Should the FHWA discover that the qualification testing was flawed, that in-service performance reveals unacceptable safety problems, or that the device being marketed is significantly different from the version that was crash tested, it reserves the right to modify or revoke its acceptance.
- 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 essentially the same chemistry, mechanical properties, and geometry as that submitted for acceptance, and that they will meet the crashworthiness requirements of the FHWA and the NCHRP Report 350.
- To prevent misunderstanding by others, this letter of acceptance, designated as number WZ-269 shall not be reproduced except in full. This letter, and the test documentation upon which this letter is based, is public information. All such letters and documentation may be reviewed at our office upon request.
- This acceptance letter shall not be construed as authorization or consent by the FHWA to use, manufacture, or sell any patented device for which the applicant is not the patent holder. The acceptance letter is limited to the crashworthiness characteristics of the candidate device, 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.

Sincerely yours,



David A. Nicol
Director, Office of Safety Design
Office of Safety