

Refer to: HSA-10/WZ-116

Mr. Randy Morse
Trafcon Inc.
P.O. Box 80268
Lincoln, Nebraska 68501

Dear Mr. Morse:

Thank you for your letter received on March 5 requesting Federal Highway Administration (FHWA) acceptance of your company's Type III barricades as crashworthy traffic control devices for use in work zones on the National Highway System (NHS). Accompanying your letter were drawings and specifications of your barricade. You requested that we find this device acceptable 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."

Introduction

The FHWA guidance on crash testing of work zone traffic control devices is contained in two memoranda. The first, dated July 25, 1997, titled "INFORMATION: Identifying Acceptable Highway Safety Features," established four categories of work zone devices: Category I devices were those lightweight devices which could be self-certified by the vendor, Category II devices were other lightweight devices which needed individual crash testing, Category III devices were barriers and other fixed or massive devices also needing crash testing, and Category IV devices were trailer mounted lighted signs, arrow panels, etc. The second guidance memorandum was issued on August 28, 1998, and is titled "INFORMATION: Crash Tested Work Zone Traffic Control Devices." This later memorandum lists devices that are acceptable under Categories I, II, and III.

Your company's Type III barricade consists of 63-inch tall, 6 gage hot rolled, high carbon steel angle upright members, 1.5 x 1.5 x 3/16 in. The horizontal feet are similar steel angles that are 60 inches long. A five inch long 2 x 2 x 0.25 in square steel tube is welded to each of the feet and support the uprights with no additional fasteners. The horizontal rails are Davidson Plastics hollow High Density Polyethylene extrusions fastened to the uprights with 0.25 inch diameter x 2.25 inch long carriage bolts. Lightweight warning lights, weighing up to 3.3 pounds, are bolted to the upright members. The barricade is shown in the enclosed drawings for reference.

Findings

These details conform to the “generic” type III barricades discussed in our Acceptance Letter WZ-85 dated November 15, 2001, and therefore are acceptable for use on the NHS under the range of conditions tested, when proposed by a State.

Please note the following standard provisions that apply to 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 FHWA and NCHRP Report 350.
- To prevent misunderstanding by others, this letter of acceptance, designated as number.
- WZ-116 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.

Your company’s Type III barricade may include patented components and if so are considered "proprietary." The use of proprietary work zone traffic control devices in Federal-aid projects is generally of a temporary nature. They are selected by the contractor for use as needed and removed upon completion of the project. Under such conditions they can be presumed to meet requirement "a" given below for the use of proprietary products on Federal-aid projects. On the other hand, if proprietary devices are specified for use on Federal-aid projects, except exempt, non-NHS projects, they:

- (a) must be supplied through competitive bidding with equally suitable unpatented items;
- (b) the highway agency must certify that they are essential for synchronization with

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, a copy of which is enclosed.

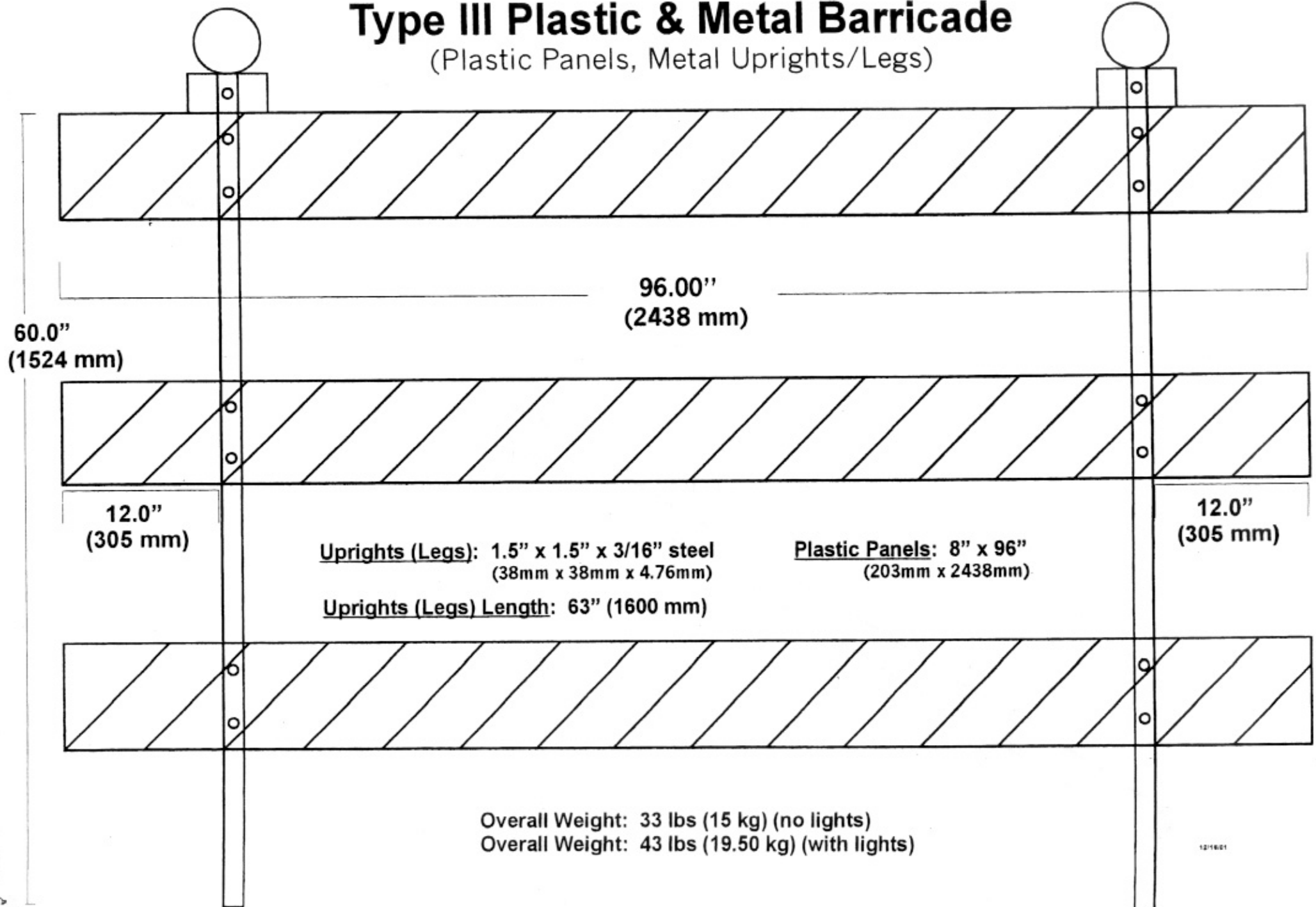
Sincerely yours,

A. George Ostensen
Program Manager, Safety

Enclosure

Type III Plastic & Metal Barricade

(Plastic Panels, Metal Uprights/Legs)



Metal Foot: 15 lbs (6.80 kgs)

