



October 2, 2007

In Reply Refer To: HSSD/WZ-253

Mr. Frank Dvoracek Three D Traffic Works 430 North Varney Street Burbank, CA 91502

Dear Mr. Dvoracek:

In your letter of October 12, 2006, and subsequent correspondence you requested the Federal Highway Administration's (FHWA) acceptance of your company's TD5275 Boomerang Reboundable Base System as a crashworthy traffic control device for use on the National Highway System (NHS). Accompanying your letter was background information regarding tests conducted on a similar product, your TD5200 reboundable delineator. You requested that we find this device acceptable for use on the NHS under the provisions of the National Cooperative Highway Research Program (NCHRP) Report 350 "Recommended Procedures for the Safety Performance Evaluation of Highway Features."

The proposed TD5275 System incorporates a flexible delineator post with different base mountings that are fixed or portable, and allows for signs to be mounted on the post to function as a vertical panel. The fixed flexible bases and portable low-profile weighted bases provide options for mounting vertical panels. Drawings and specifications of the devices are enclosed.

Based on our records of successfully crash tested vertical panels, equivalent designs such as yours are crashworthy. Therefore, lightweight vertical panels with no lights attached, mounted to a flexible or a low-profile weighted base are now accepted by the FHWA as a Category 1 device and may be self-certified by the vendor. Delineators are Category 1 devices as well. As a reminder, crash testing is still needed to determine FHWA acceptance of vertical panels with lights attached.

Please note the following standard provisions that apply to this FHWA letter 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-253, 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,

Yearg ERice, George E. Rice, Jr.

Acting Director, Office of Safety Design

Office of Safety

Enclosures

## **SPECIFICATIONS**

Mass Weight of system: 42 lbs.

### INTENDED USE

TD5275 Boomerang Portable Base Mount System has a double sided Vertical Panel mounted on a plastic post, attached to an elastomer base in an ABS mounting plate, fastened to a rubber base. This device is intended for work zone channelization and warning situations as required by MUTCD and State regulations, and for temporary applications requiring a portable mounting of a vertical panel.

Components: Extruded Plastic Panel, 18" wide X 42" tall by 0.125 thich. Qty: 2 panels.

Post: 2.250 dia X 48" long plastic, LDPE material. Qty: 1 post.

Boomerang Base: 8" dia X 5.250 high, elastomer material. Qty: 1.

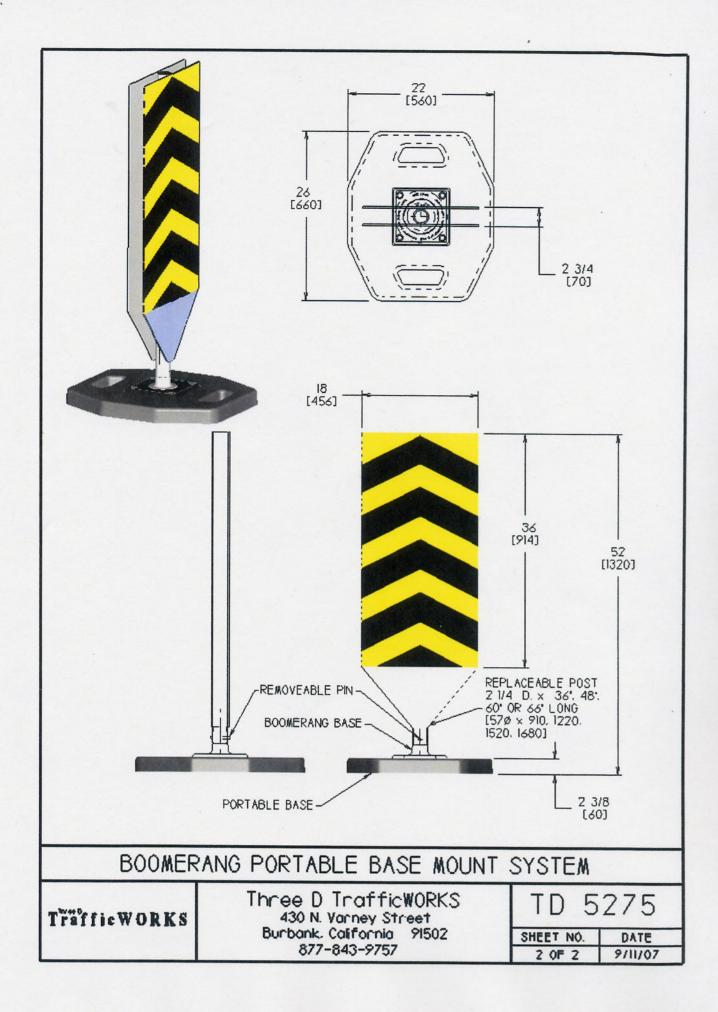
Bolt-Down Plate: 8.500 square X 1.0625 high, ABS plastic Qty: 1.

Quick Release Pin: Steel. Qty: 1.

Fasteners: ½-20 HH bolts and Jack Nuts, steel. Qty: 6 sets. ½-13 HH bolts, washers and lock nuts. Qty: 4 sets. Steel.

Base: 22" wide X 26" long X 2.375 high base. 100% Post-Consumer Recycled Rubber. Qty: 1.

# TD5275 Boomerang Portable Base Mount System WZ-253 Three D Traffic Works 430 N. Varney St.. SHEET NO. DATE Burbank, CA 91502 877 843 9757 toll free 818 841 5096 fax



### **SPECIFICATIONS**

Mass Weight of system: 10 lbs.

# INTENDED USE

TD5275 Boomerang Surface Mount System has a double sided Vertical Panel mounted on a plastic post, attached to an elastomer base in an ABS mounting plate. This device is intended for work zone channelization and warning situations as required by MUTCD and State regulations, and for permanent applications requiring a fixed mounting of a vertical panel.

Components: Extruded Plastic Panel, 18" wide X 42" tall by 0.125 thich. Qty: 2 panels.

Post: 2.250 dia X 48" long plastic, LDPE material.

Qty: 1 post.

Boomerang Base: 8" dia X 5.250 high, elastomer material. Qty: 1.

Bolt-Down Plate: 8.500 square X 1.0625 high, ABS plastic Qty: 1.

Quick Release Pin: Steel.

Qty: 1.

Fasteners: ½-20 HH bolts and Jack Nuts, steel.

Qty: 6 sets.

# **TD5275 Boomerang Surface Mount System**

WZ-253		Three D Traffic Works
SHEET NO.	DATE	430 N. Varney St.
	08/31/07	Burbank, CA 91502

