

Refer to: HSA-10/WZ-118

Mr. R. Scott Behm
National Sales Manager
Three D Traffic Works, Inc.
430 North Varney Street
Burbank, California 91502

Dear Mr. Behm:

Thank you for your letter of March 11, 2002, requesting Federal Highway Administration (FHWA) acceptance of your company's channelizing devices as crashworthy traffic control devices for use in work zones on the National Highway System (NHS). Accompanying your letter was product literature for these items. You requested that we find the TD6000 VIP Vertical Indicator Panel and the TD6000 Ringtop Delineator Post and Ringtop Stackable Cone 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." You also requested a modification to your company's Type III barricade design that was originally found acceptable in our letter WZ-82 of September 14, 2001. Action on the barricade was handled in Acceptance Letter WZ-128 dated July 12, 2002.

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. A brief description of the devices follows:

The **TD6000 VIP Vertical Indicator Panel** is a Category 2 work zone traffic control device. It is molded of Low Density Polyethylene and is available in two heights, 45 inches and 52 inches.

The weight of the 45 inch VIP is 5.5 pounds. Either may be ballasted with recycled rubber bases weighing 10, 20, or 30 pounds. The highest of these bases has a profile of 3.5 inches above the pavement.

The **Rigtop Delineator Post and Ringtop Stackable Cone** are Category 1 work zone traffic control devices and thus require no additional action by the FHWA for them to be acceptable for use on the NHS. Category 1 devices must be self-certified by the manufacturer that they meet crashworthiness requirements. More information on the self-certification of Category 1 devices may be found in our memorandum of August 28, 1998. This memorandum may be seen from our web site: http://safety.fhwa.dot.gov/fourthlevel/pro_res_road_pol.htm You may also find our Question and Answer page to be of help at: <http://safety.fhwa.dot.gov/fourthlevel/qanda.htm> If these devices are to be used with a warning light, flags or sign on top then they need to be crash tested.

Findings

The VIP Vertical Indicator Panel with rubber base is similar to a number of other vertical panel and cone devices. We concur in your contention that it may be considered crashworthy with no additional testing and, therefore, the devices described above and shown in the enclosed drawings for reference are acceptable for use on the NHS under the range of conditions similar models were 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-118 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.
- The VIP Vertical Indicator Panel is patented and 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,

Carol H. Jacoby, P.E.
Director, Office of Safety Design

Enclosure

Sec. 635.411 Material or product selection.

(a) Federal funds shall not participate, directly or indirectly, in payment for any premium or royalty on any patented or proprietary material, specification, or process specifically set forth in the plans and specifications for a project, unless:

(1) Such patented or proprietary item is purchased or obtained through competitive bidding with equally suitable unpatented items; or

(2) The State highway agency certifies either that such patented or proprietary item is essential for synchronization with existing highway facilities, or that no equally suitable alternate exists; or

(3) Such patented or proprietary item is used for research or for a distinctive type of construction on relatively short sections of road for experimental purposes.

(b) When there is available for purchase more than one nonpatented, nonproprietary material, semifinished or finished article or product that will fulfill the requirements for an item of work of a project and these available materials or products are judged to be of satisfactory quality and equally acceptable on the basis of engineering analysis and the anticipated prices for the related item(s) of work are estimated to be approximately the same, the PS&E for the project shall either contain or include by reference the specifications for each such material or product that is considered acceptable for incorporation in the work. If the State highway agency wishes to substitute some other acceptable material or product for the material or product designated by the successful bidder or bid as the lowest alternate, and such substitution results in an increase in costs, there will not be Federal-aid participation in any increase in costs.

(c) A State highway agency may require a specific material or product when there are other acceptable materials and products, when such specific choice is approved by the Division Administrator as being in the public interest. When the Division Administrator's approval is not obtained, the item will be nonparticipating unless bidding procedures are used that establish the unit price of each acceptable alternative. In this case Federal-aid participation will be based on the lowest price so established.

(d) Appendix A sets forth the FHWA requirements regarding (1) the specification of alternative types of culvert pipes, and (2) the number and types of such alternatives which must be set forth in the specifications for various types of drainage installations.

(e) Reference in specifications and on plans to single trade name materials will not be approved on Federal-aid contracts.

ENCLOSURE 2

VIPtmVERTICAL INDICATOR PANEL
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Info Sheet](#)[Contact Us](#)©1999,2002
Three D
Traffic Works,
Inc.Warning Light
Application

FEATURES

- Large handle area insures an easy grip.
- Includes a built in caution tape knob for simple wrap around tape application.
- Manufactured from specially formulated plastic compound, utilizing polymer protection and UV stabilizers.
- Extra large flange provides ultra support while on the job or stacked with **TD8000** Diamond Series rubber bases.
- Available with 100% recycled Diamond Series rubber bases in 22 and 32 lb. weights.
- See **TD8000** for benefits.

COLORS AVAILABLE

The TD6000 VIP is currently available in fluorescent orange or white. Three D Traffic Works can manufacture this product to your desired color.

**GENERAL
SPECIFICATIONS**

*General information is listed on the **Specification Page**. The measurements provided are intended only as a source of information. They are given without guarantee and are not classified as a warranty. A specification will be sent to you upon request.*

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TD6000

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VIPtm
VERTICAL INDICATOR PANEL
TD6000 SERIES
SPECIFICATIONS

- **Dimensions of Model TD6100**

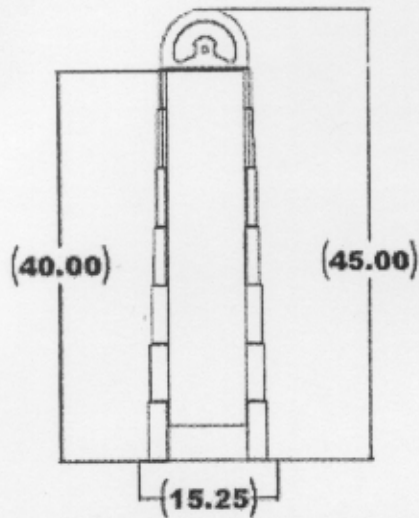
Height: 45 Inches
Panel Height: 40 Inches
Width at Base: 15.25 Inches
Weight: 5.5 lbs.

- Product to have recessed hole for light attachment and leveler pad for light on opposite side of unit.
- Colors: Fluorescent Orange and White.
- Material: Low or High Density Polyethylene.

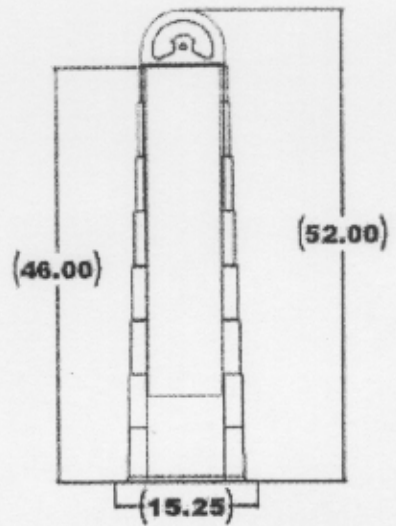
- **Dimensions of Model TD6200**

Height: 52 Inches
Panel Height: 46 Inches
Width at Base: 15.25 Inches
Weight: 6.5 lbs.

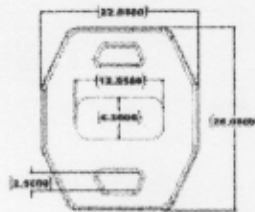
- VIP Vertical Panel is a two-piece design consisting of a molded plastic vertical panel and 100% recycled "Diamond" Series rubber base available in 20 and 30 lb. weight.
- Vertical Panels conform to NCHRP350 Report and Federal standards for nighttime use.



TD6100 45" Standard VIP



**TD6200 52" Snow Area/High
Visibility VIP**



**20 & 30 lb. TD8200 Series
Diamond Series Rectangular
Base**



**Three D
Traffic Works, Inc.**

**MADE IN
USA**

430 N Varney St, Burbank, CA 91502 * (877) 843-9757 * Fax (818) 841-5096
sales@trafficwks.com

RINGTOPtm

PORTABLE 4" TUBE DELINEATOR WITH DIAMOND SERIES BASE TD5100 SERIES

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FEATURES

- Large opening for easy handling.
- Caution tape knob for wrap around application.
- Support rings around reflective bands added tape protection.
- Manufactured from specially formulated plastic compound utilizing polymer protection, and UV stabilizer.
- Available with 100% recycled Diamond Series rubber base in 8 lb, 10 lb, 12 lb and 18 lb weights.
- See [TD8000](#) for benefits.

COLORS AVAILABLE

The TD5100 Delineators are currently available in white, orange or yellow. Three D Traffic Works can manufacture this product to your desired color.

GENERAL INFORMATION

*General information is listed on the **Information Page**. The measurements provided are intended only as a source of information. They are given without guarantee and are not classified as a warranty. A specification will be sent to you upon request.*

RINGTOP™ DELINEATOR

TD5100 SERIES SPECIFICATIONS

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- **Dimensions**

Height: 39 and 42 Inches
Width: 4 Inches

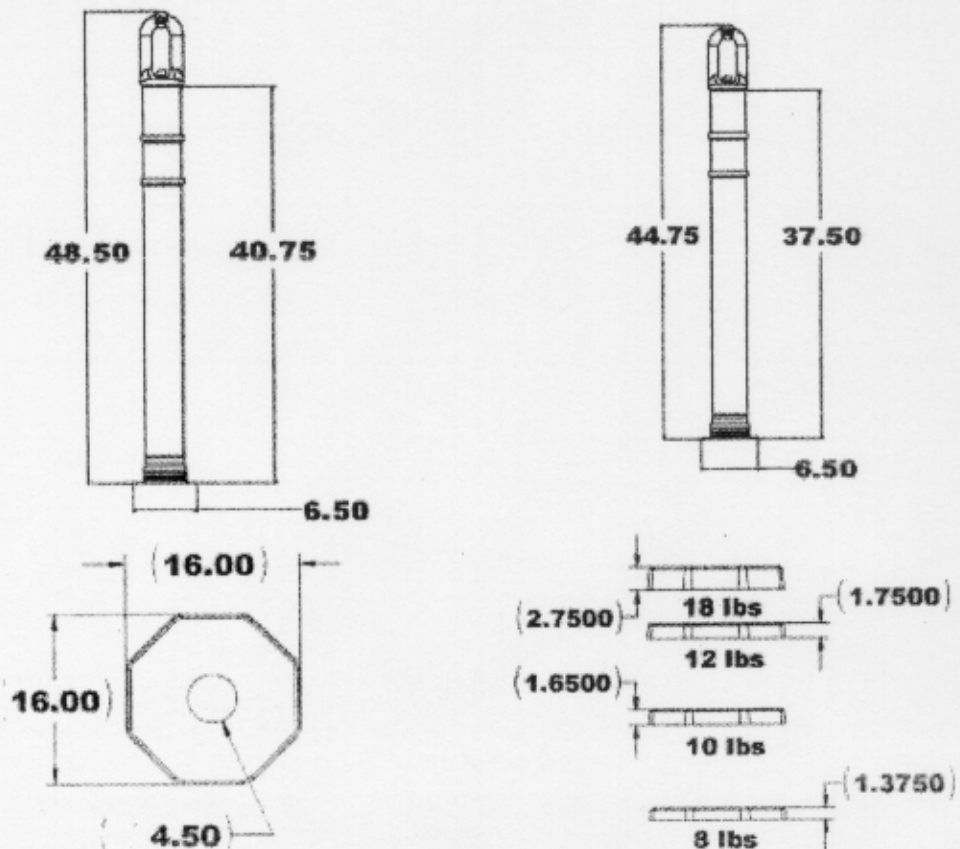
- **TD5100 Ringtop™** Delineators conform to MUTCD requirements.

- **Color:**
Fluorescent Orange.

- **Material**

High Density Polyethylene.

- **TD5100 Ringtop™** Portable Delineator is a two-piece design consisting of a HDPE Tube and TD8000 Diamond Series 100% Recycled rubber base for ballast.



• TD8000 Series Diamond Base Material is 100% Recycled rubber.