



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

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

March 11, 2009

In Reply Refer To: HSSD/WZ-180A

Mr. Craig Schultz
Davidson Traffic Control Products
3110 70th Avenue East
Tacoma, WA 98424

Dear Mr. Schultz:

In your letter of January 21 you requested the Federal Highway Administration (FHWA) acceptance of the O-frame Type I and Type II barricade as a crashworthy traffic control device for use in work zones on the National Highway System (NHS). Accompanying your letter was the FHWA Office of Safety Design form that included a drawing and a detailed description of the device. The drawing is enclosed with the acceptance form for the Type I and Type II barricade. You have clearly outlined the slight design modification made to the previously accepted device (WZ-180) and requested that we find this device acceptable for use on the NHS under the provisions of National Cooperative Highway Research Program Report 350 "Recommended Procedures for the Safety Performance Evaluation of Highway Features."

This letter is the acknowledgement of the FHWA's acceptance of your request. The original completed forms have been modified by the addition of the FHWA acceptance letter number and the date of our review. The form will be posted on our Web site in the near future.

Sincerely yours,

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

Enclosures



Page 1	FEDERAL HIGHWAY ADMINISTRATION OFFICE OF SAFETY DESIGN	Letter Number
	Category 2 Work Zone Device Acceptance Letter	WZ-180A
		Date
		3/9/09
Contact Info	Petitioner / Developer Name and Address:	
	Mr/ Craig Schulz Davidson Traffic Control Products 3110 70th Ave East Tacoma, WA 98424	
	I hereby certify that the device(s) covered by this Acceptance Letter meet(s) the crash – worthiness test and evaluation requirements of the FHWA and NCHRP Report 350.	
Signature		
Telephone #	(253) 284-8000	
Email Address	craigschulz@filtrona.com	
	Laboratory / Engineer Name and Address	
<input type="checkbox"/>	I hereby certify that the testing that supports this Acceptance Letter was conducted in accordance with NCHRP Report 350 guidelines, that the device(s) tested is/are accurately described on this form, and that the test results indicate that the device meets all applicable NCHRP Report 350 evaluation criteria.	
<input checked="" type="checkbox"/>	I have evaluated the requested modifications to these devices previously found acceptable by the FHWA in Acceptance Letter WZ-___, and hereby certify that, in my opinion, the modifications do not adversely affect the crash performance of the devices. I also certify that these devices are accurately described on this form.	
Signature		
Telephone #		
Email Address		
Keywords:	Type I & II Barricade Leg	
	Type of Device (See page 3) Type I Barricade	
	Composition of Sign or Rail substrate (See Page 3) Extruded Plastic	
	Thickness of substrate (inches): 0.13	
	Height of sign from the ground (inches), if applicable: (See Page 3)	
	Flags and or lights present during test? Indicate number of each:	
	# of flags:	# of lights: Weight of lights: ea.
Device Name	O-Frame Barricade Leg	
Detailed Desc. Of Device, Materials, sizes, Fasteners, Substrates Foundation, Aux. Features Ballast, etc.	(May be attached on separate page(s)) O-Frame is a modification to our original A-Frame Barricade that was accepted under WZ-180 in October 2004. The O-Frame has virtually the same weight and is constructed of HDPE resin, the change to the product comes with the addition of two slots in the lower portion of the legs to accept our 1x8 inch barricade panel to allow for the barricade to be more ADA friendly. All accessory parts for the frame are unchanged, with the actual weight of the frame dropping from 7.1 pounds to 6.2 pounds.	

Page 2	FEDERAL HIGHWAY ADMINISTRATION OFFICE OF SAFETY DESIGN		Letter Number
	Category 2 Work Zone Device Acceptance Letter		(WZ-180A)
			Date
			3/9/09
	Mandatory Attachments		
	Attachment # 1: Test data summary page(s)		
	Attach. #1a	Test #	
	Attach. #1b	Test #	
	Attach. #1c	Test #	
	Attach. #1d	Test #	
Alternative	Attachment # 1: Description and discussion of modification(s) to crash tested and/or accepted device.		
	Date: 03/06/2009		
	Attachment # 2: PDF drawing(s) of device(s)		
	Attach. #2a	Drawing Title: O-Frame Drawing	
		Drawing #:	
	Attach. #2b	Drawing Title:	
		Drawing #:	
	Attach. #2c	Drawing Title:	
		Drawing #:	
	Attach. #2d	Drawing Title:	
		Drawing #:	
	Attach. #2e	Drawing Title:	
		Drawing #:	
	Attach. #2f	Drawing Title:	
		Drawing #:	
	Attach. #2g	Drawing Title:	
		Drawing #:	

Page 3	FEDERAL HIGHWAY ADMINISTRATION OFFICE OF SAFETY DESIGN Category 2 Work Zone Device Acceptance Letter	Letter Number WZ-180A
		Date 3/9/09

Please select from the following Keywords for “Type of Device”:

Longitudinal Channelizing Barricade
 Curb (Curb channelizer system with or without road tubes or other channelizers)
 Drum
 H-Footprint Sign Stand
 X-Footprint Sign Stand
 Trailer Mounted Signs (Does not include arrow boards or variable message signs or other Category 4 trailer mounted devices.)
 Automated Flagger Device (not trailer mounted)
 Tripod Sign Stand
 Type I Barricade
 Type II Barricade
 Type III Barricade
 Vertical Panel
 Intrusion Detector
 Ballast (Action relates to ballast on one or more devices)
 Channelizer (Individual units unlike cones, road tubes, or drums)

Please select from the following Keywords for “Sign Substrate”:

Roll-up / Fabric (with fiberglass spreaders – aluminum or steel spreaders are not allowed.)
 Plywood
 Aluminum – Solid
 Aluminum – Laminate
 Corrugated Plastic
 Extruded Plastic
 Waffleboard Plastic
 Wood / Lumber

Please select from the following Keywords for “Height of Sign”:

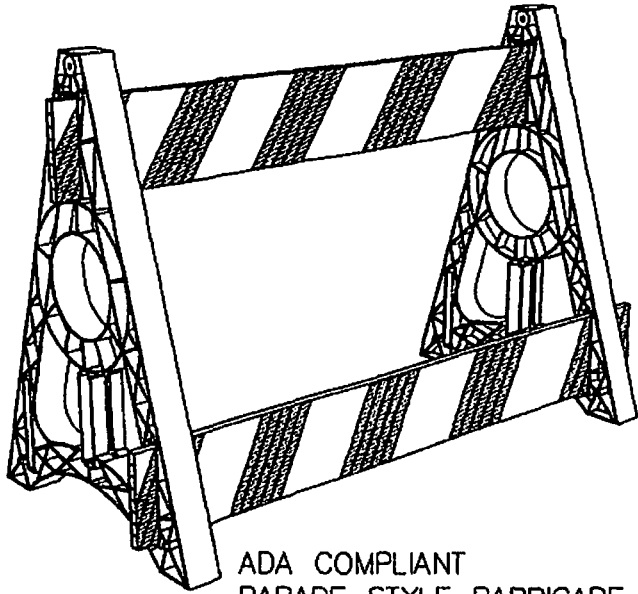
The distance to the lowest point on the sign is:

Low	12 to 18 inches above the pavement
Mid-A	20 to 24 inches above the pavement
Mid-B	25 to 36 inches above the pavement
Mid-C	37 to 59 inches above the pavement
Tall	60 to 71 inches above the pavement
Oversized	72 inches and taller

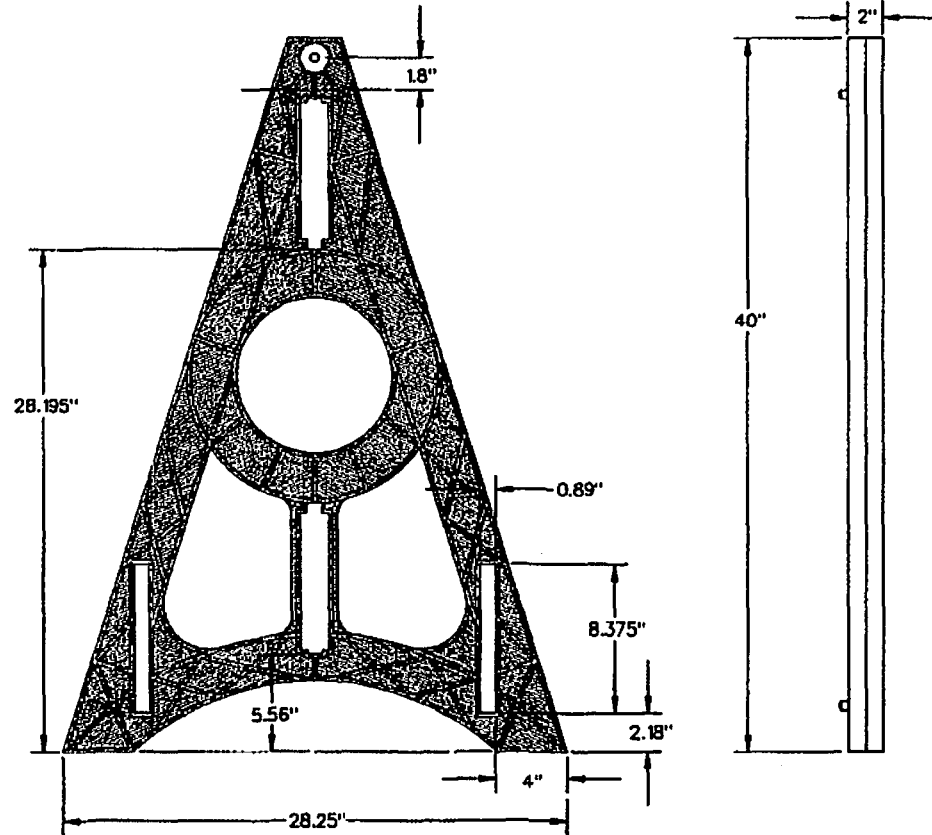
Page 4	FEDERAL HIGHWAY ADMINISTRATION		Letter Number
	OFFICE OF SAFETY DESIGN		WZ-180A
	Category 2 Work Zone Device Acceptance Letter		Date
			3/9/09


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, or 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 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.
- If the subject of this letter is a patented device it is 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 by a highway agency* for use on Federal-aid 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.
- This Acceptance Letter shall not be construed as authorization or consent by the Federal Highway Administration 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.




ADA COMPLIANT
PARADE STYLE BARRICADE



PART NAME		
O-FRAME		
DEPT. HEAD	ENGINEERING MANAGER	DATE
		7/1/08
 Davidson Traffic Control Products <i>"Creating Products to Save Lives"</i>		
www.davidsontraffic.com hwysclass@filtrona.com		

This drawing and other Davidson products are available in AutoCAD format with simple drag and drop features to transfer product information directly into design drawings. Davidson's product CD works with all software packages, and the CAD library allows for fluid transfer of files across all OS platforms. To register for your free copy, please contact your Davidson Sales Representative or email hwysclass@filtrona.com.

AutoCAD CD Available

		TACOMA PLANT 3119 77th. Ave. East Tacoma, Washington 98424 Phone: (253)234-8800 Fax: (253)234-8888	
DR. NUMBER 7624		PART NUMBER 80BARELG08	
DATE	DRN BY	LAST REV.	
07/01/08	DB~	A 07/01/08	

January 21, 2009

Mr. Matt Lupes, P.E.
Highway Safety Engineer
Federal Highway Administration
Office of Safety Design – HSSD, Room E71-109
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Matt:

We are writing to request an amendment to HSA-10/WZ-180 for acceptance by your office of our "O-FrameTM" Type I and II parade style barricade leg as a crashworthy Category I device suitable for use on the National Highway System. The O-Frame is modular type system that utilizes the following components:

Component	Composition	Dimension	Weight
Barricade Leg	Thermoplastic – Injection Molded	40"x28"x1.75"	6.2#
Logo Insert	Thermoplastic – Cut Sheet	13.8" Diameter	.2#
Parade Panel	Thermoplastic Profile	7.75" x 1.5" x 96"	5.37#
T3B 8 inch Panels	Thermoplastic Profile	8" x .75" x 96"	5.25#

Our new O-frame is slight variation of that standard A-Frame barricade legs that have been in use throughout the United States for years. Our O-Frame allows for ADA compliance through lowering the barricade panels nearly too the ground. The leg does allow for the use of a cup washer "vandal resistant" mounded light as acceptable per TTI testing in the past. This new design is a variation of a very well established product in the marketplace that is adding safety for visually impaired pedestrians.

Hence we are asking for your acceptance of our "O-Frame" Parade style barricade leg as a crashworthy device suitable for use on the National Highway System.

If you have any questions regarding the submission, please contact me by email at craigschulz@filtrona.com or by phone to (253) 284-8000.

Thank you for your consideration of our request.

Best regards,

Craig Schulz
Technical Sales
Davidson Traffic Products – Filtrona Extrusion