



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

March 21, 2007

400 Seventh St., S.W.
Washington, DC 20590

In Reply Refer To:
HSSD/WZ-228

Mr. Peter Speer
Davidson Traffic Control Products
Filtrona Extrusion, Inc.
3110 70th Avenue East
Tacoma, WA 98424

Dear Mr. Speer:

Thank you for your letter requesting the Federal Highway Administration (FHWA) acceptance of your company's Steel-Kade Type I and Type II barricades with angle iron legs and plastic panels as a crashworthy traffic control device for use in work zones on the National Highway System (NHS). You've requested we find the 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."

The Steel-Kade is a modular barricade comprised of the following components:

Component	Composition/Brand	Dimensions/Notes	Weight	Quantity
Barricade legs	Hot-rolled angle iron	1 ¼ x 1 ¼ x 45 inches	2.3 - 3 lbs.	4 per each
12 x 24 inch Panels	High Density PE	5/8 x 12 x 24 inches	1.74 lbs.	0 - 2 each
8 x 24 inch Panels	High Density PE	5/8 x 8 x 24 inches	1.18 lbs.	0 - 4 each
6 x 24 inch Panels	High Density PE	5/8 x 6 x 24 inches	0.89 lbs.	0 - 2 each
4 x 24 inch Panels	High Density PE	5/8 x 4 x 24 inches	0.63 lbs.	0 - 2 each
Hardware Kit	Steel	5/16 x 1 inch Bolts, Nuts	2.1 lbs.	1 per each
Barricade Light	Empco-lite	Model 100 or 2000	3.3 lbs.	Optional

The components listed above are assembled into a complete barricade as described in the enclosed drawing. The legs may consist of 12 or 14 gauge, powder coated or galvanized, hot roll formed, high carbon angle iron or galvanized steel. The barricade configurations consist of either an 8 or 12 inch top panel, and an 8 inch bottom panel, with an optional 4 or 6 inch panel at the bottom to provide for identification of the user agency.



In support of your request you reference our November 1998 acceptance letter, WZ-6, and our October 2003 acceptance letter, WZ-165, issued for similar parade style barricades. Type I and Type II Generic barricades, to which your barricades conform, are detailed in our memorandum dated November 15, 2001 (WZ-85). Your Steel-Kade barricade is essentially identical in form and function to the barricades identified in acceptance letters WZ-6, WZ-85, and WZ -65. Since the barricades described above and in the enclosed drawing have either been successfully crash tested or conform to the FHWA's generic barricade specifications, they will be acceptable for use on the NHS under the range of conditions that the generic barricades were tested, when proposed by a State. A lightweight warning light may be attached to the top of Steel-Kade barricades provided it is securely attached with the tamperproof hardware supplied by the light manufacturer.

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-228, 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 Steel-Kade barricade device described above 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 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.

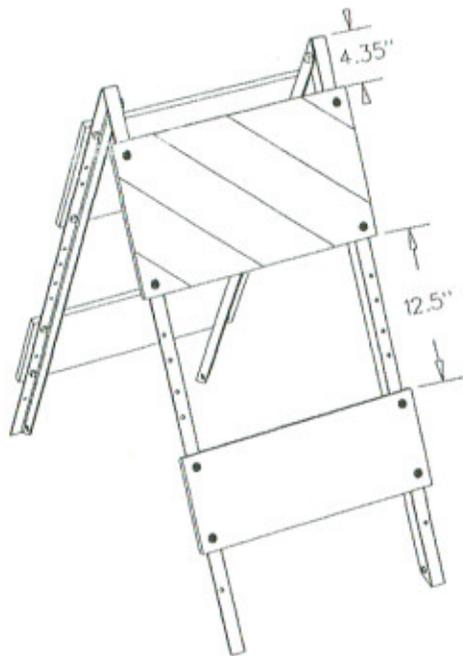
- This acceptance letter shall not be construed as authorization or consent by the FHWA to use, manufacture, or sell any patented device for which the applicant is not the patent holder. The acceptance letter is limited to the crashworthiness characteristics of the candidate device, and the FHWA is neither prepared nor required to become involved in issues concerning patent law. Patent issues, if any, are to be resolved by the applicant.

Sincerely yours,

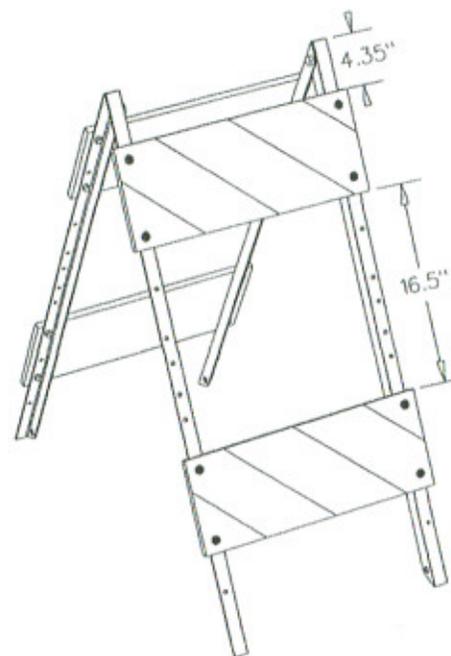
A handwritten signature in blue ink, appearing to read "John R. Baxter".

John R. Baxter, P.E.
Director, Office of Safety Design
Office of Safety

Enclosure



- TYPE 1 STEEL-KADE**
 2 SETS STEEL LEGS
 1 EA 8T1B12L & 8T1B12R PANELS
 2 EA 8T1B0800 PANELS
 16 CARRIAGE BOLTS WITH NYLOCK NUTS



- TYPE 2 STEEL-KADE**
 2 SETS STEEL LEGS
 2 EA 8T1B08L & 8T1B08R PANELS
 16 CARRIAGE BOLTS WITH NYLOCK NUTS

PART NAME		
T1B / T2B WITH STEEL LEGS		
DEPT. HEAD	ENGINEERING MANAGER	DATE



Davidson Traffic Control Products
"Creating Products to Save Lives"

www.filtronaextrusion.com
 hwysales@filtronaextrusion.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 hwysales@filtronaextrusion.com.

AutoCAD CD Available

 FILTRONA EXTRUSION		TACOMA PLANT 3110 70th. Ave. East Tacoma, Washington 98424 Phone: (253)284-8001 Eng.Fax: (253)284-8094
DESCRIPTION		
T1B & T2B BARRICADE WITH STEEL LEGS		
DATE	DRAWN BY	LAST REV.
12/21/2005	DB~	A 12/21/05