



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

1200 New Jersey Ave., SE
Washington, D.C. 20590

10/22/10

In Reply Refer To:
HSSI/WZ-25A

Mr. John M. Pasakarnis
Dicke Safety Products
1201 Warren Avenue
Downers Grove, IL 60515

Dear Mr. Pasakarnis:

This is in response to your October 7 correspondence requesting the Federal Highway Administration's (FHWA) acceptance of your company's Model FS2000W portable sign stand as a crashworthy traffic control device for use in work zones and elsewhere on the National Highway System (NHS). Accompanying your letter was the FHWA Office of Safety Design form explaining the change from a coiled spring (as in the Model UF2000W stand accepted in WZ-25) to a flat one. You 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 form has been modified by the addition of the FHWA acceptance letter number and the date of our review. The form, of which a copy is enclosed for reference, will be posted on our Web site in the near future.

Sincerely yours,

Michael S. Griffith
Director, Office of Safety Technologies
Office of Safety

Enclosure





DICKE SAFETY PRODUCTS

1201 Warren Avenue • Downers Grove, IL 60515 • Ph: 877.891.0050 • Fax: 630.969.3973

October 07, 2010

Mr. Nick Artimovich, II
Highway Engineer
Federal Highway Administration
Office of Safety Design
1200 New Jersey Avenue, SE HSSD
Washington, DC 20590

Dear Mr. Artimovich,

This inquiry is in regards to a modified version of the previously accepted UF2000W sign stand (HAS-1/WZ-25). The new version of this stand FS2000W replaces the coiled spring with a flat steel spring. The stand footprint is the same while the top of the sign bracket is actually lower. The stand specifications may be found in Table #1 below and in the attached drawings.

Table #1 – Stand Comparison

Model:	Weight:	Base Width:	Base Length:	Sign Ht:	Deployed Ht:
UF2000W	20.6 lbs	58 inches	90 inches	12.75 inches	80.75 inches
FS2000W	16.2 lbs	58 inches	90 inches	12.75 inches	80.75 inches

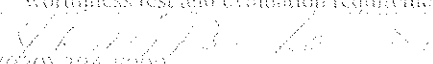
Request #1:

Based on the enclosed information and previous test data, we are seeking acceptance of sign stand FS2000W. We believe this to be a reasonable request because the design differences all occur below the height of the vehicle bumper. As such, we contend that they will have no effect on the windshield impact data.

Should you need any further documentation, please let me know.

Sincerely,

John M. Pasakarnis
Dicke Tool Company
630-969-0050 x28
john@dicketool.com
www.dicketool.com

Report # Date of Report Title of Report	Report Number WZ-25A Date 10/20/10
Contact Info	Prof/Ingr. / Developer Name and Address Dicko Safety Products 1201 Warron Avenue Downers Grove, IL 60015
Signature Telephone # Email Address	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.  (630) 324-3200 john@dickosafety.com
<input type="checkbox"/>	Laboratory / Supplier 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 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:	#82000W Type of Device (See page 3) X-postprint Sign Stand Composition of Sign or Rail substrate (See Page 3) Roll-up / Fabric (with fiberglass spreaders – aluminum or steel spreaders are not allowed) Thickness of substrate (inches): Height of sign from the ground (inches), if applicable: (See Page 3) Low: 12 to 18 inches above the pavement Flags and or lights present during test? Indicate number of each: # of flags: 2 # of lights: Weight of lights: ea.
Device Name Detailed Desc. Of Device Materials, sizes, fasteners, Substrates, foundation, Aux. Features, Ballast, etc.	(May be attached on separate page(s)) See attached submittal letter and drawings.

Type	<p>Attachment # 1: Test data summary page(s)</p> <p>Attachment # 2: Work Zone Device Acceptance Letter</p>	<p>Attachment # 1</p>
Alternative	<p>Attachment # 1: Test data summary page(s)</p> <p>Attachment # 1a Test #</p> <p>Attachment # 1b Test #</p> <p>Attachment # 1c Test #</p> <p>Attachment # 1d Test #</p>	<p>Date</p>
	<p>Attachment # 1: Description and discussion of modification(s) to crash tested and/or accepted device.</p>	
	<p>Date: 10/07/2010</p>	
	<p>Attachment # 2: PDF drawing(s) of device(s)</p>	
	<p>Attach. #2a</p>	<p>Drawing Title: WZ submittal letter (PDF)</p> <p>Drawing #:</p>
	<p>Attach. #2b</p>	<p>Drawing Title: FS2000W dwg (PDF)</p> <p>Drawing #:</p>
	<p>Attach. #2c</p>	<p>Drawing Title: UF2000W dwg (PDF)</p> <p>Drawing #:</p>
	<p>Attach. #2d</p>	<p>Drawing Title: Stand photo comparison (PDF)</p> <p>Drawing #:</p>
	<p>Attach. #2e</p>	<p>Drawing Title:</p> <p>Drawing #:</p>
	<p>Attach. #2f</p>	<p>Drawing Title:</p> <p>Drawing #:</p>
	<p>Attach. #2g</p>	<p>Drawing Title:</p> <p>Drawing #:</p>

Type of Device (Select from the following list of keywords for "Type of Device") (Please select from the following list of keywords for "Type of Device")	Filter Status (Select from the following list of keywords for "Filter Status")
Category of Maintenance Item (Select from the following list of keywords for "Category of Maintenance Item")	Date

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
- B-Pumpkin Sign Stand
- K-Footprint Sign Stand
- Trailer Mounted Signs (Does not include arrow boards or variable message signs or other Category 4 trailer-mounted devices.)
- Automated Flipper 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 – Laminated
- 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:

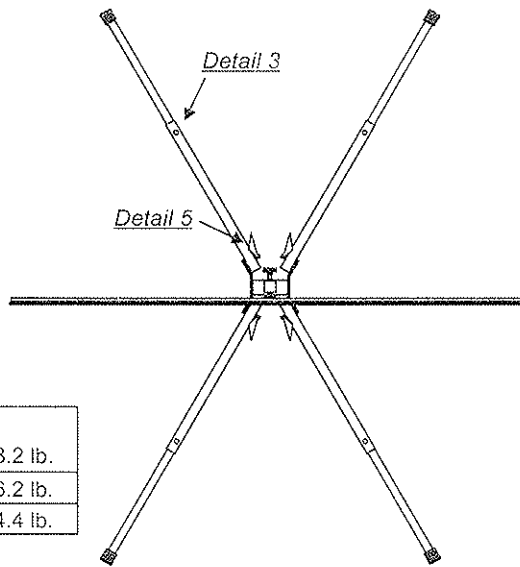
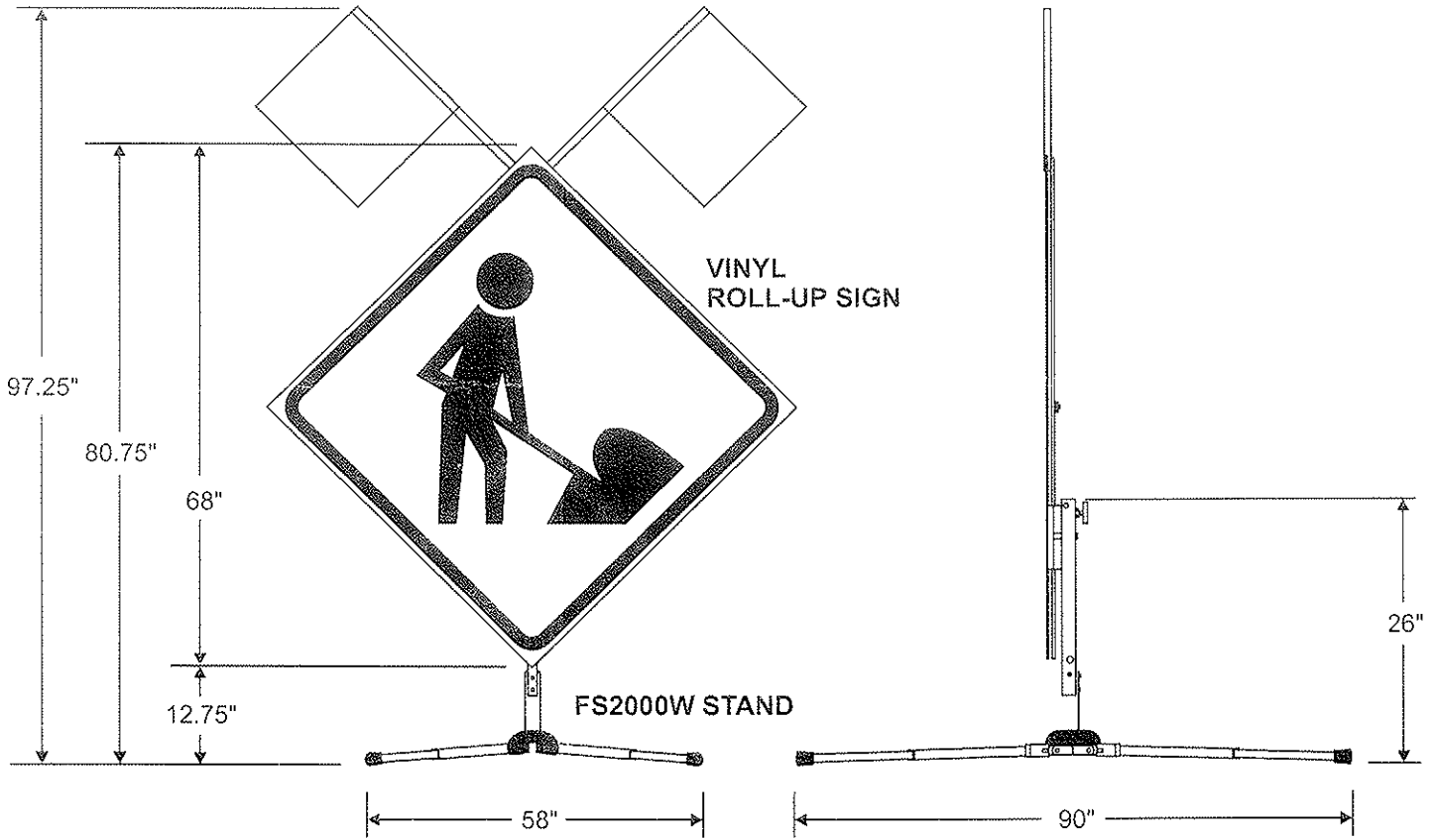
- Low 12 to 18 inches above the pavement
- Mid-A 20 to 24 inches above the pavement
- Mid-B 25 to 36 inches above the pavement
- Mid-C 37 to 59 inches above the pavement
- Tall 60 to 71 inches above the pavement
- Oversized 72 inches and taller

FEDERAL HIGHWAY ADMINISTRATION WASHINGTON, D. C. 20591-0001		Letter Number
Proposed Work Zone Device Acceptance Letter		Date

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.

FS2000W



Weight: FS2000W

Sign, Crossbrace, Flags	8.2 lb.
Sign Stand	16.2 lb.
Total	24.4 lb.

FS2000W STAND

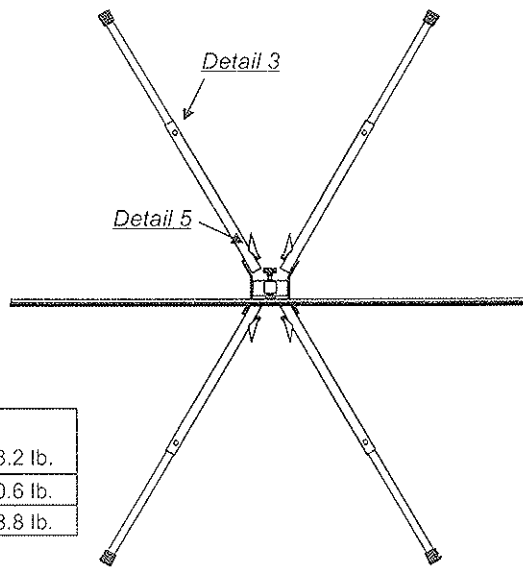
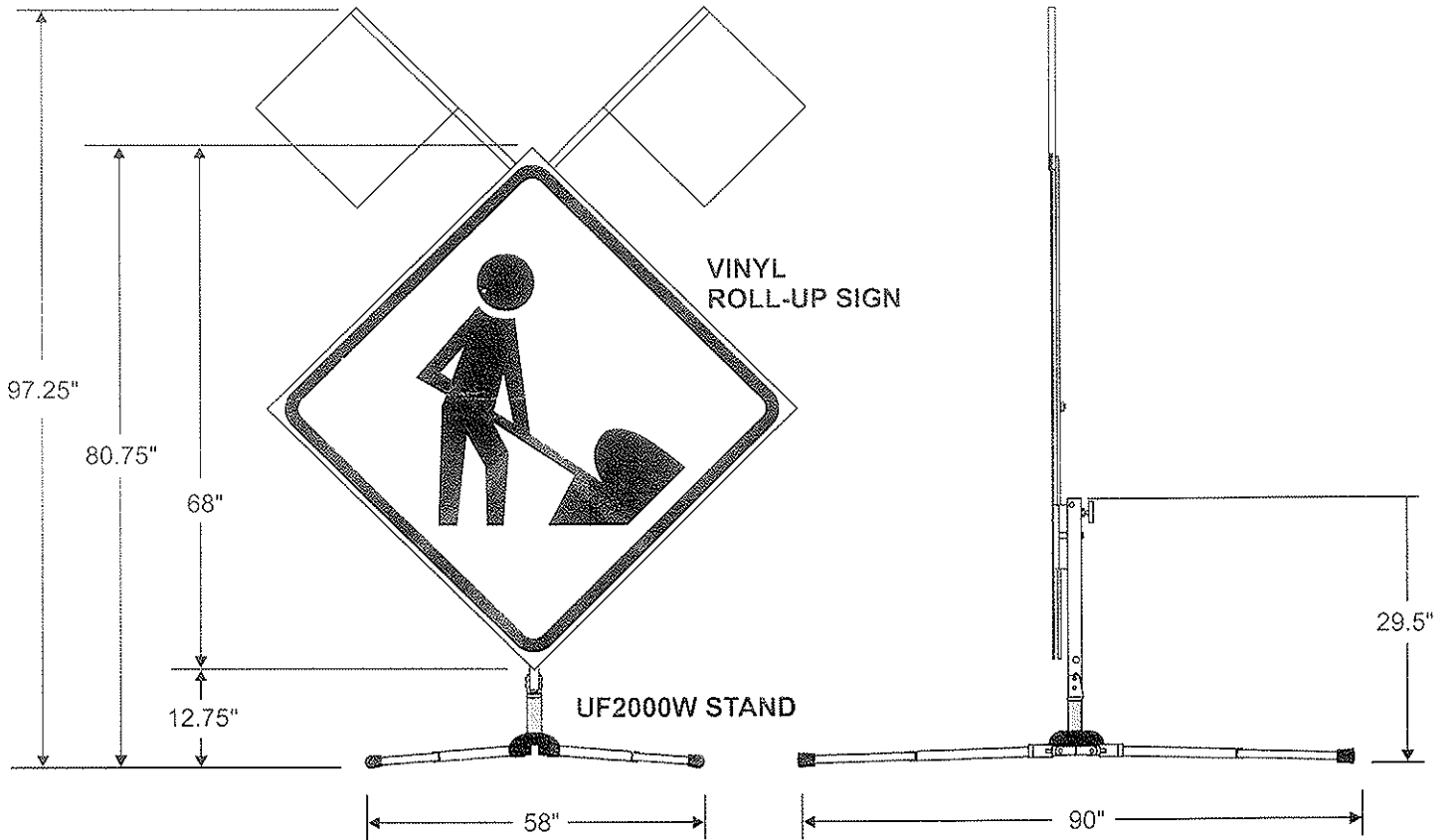
- Base- Steel with single upright flat spring system
- Legs- Telescopic 1-1/4" and 1" sq. aluminum tubing

RUR48 SIGN

- Panel- Reflective vinyl, 48" x 48"
- Crossbrace- Vertical member is 3/8" th. x 1-1/4" w x 66-1/14" long fiberglass
- Crossbrace- Horizontal member is 3/16" th. x 1-1/4" w x 66-1/4" long fiberglass
- Flags- 18" x 18" vinyl with 1/8" th. x 1" w x 30" fiberglass staff



UF2000W



Weight: UF2000W

Sign, Crossbrace, Flags	8.2 lb.
Sign Stand	20.6 lb.
Total	28.8 lb.

UF2000W STAND

- Base- Steel with single upright spring system
- Legs- Telescopic 1-1/4" and 1" sq. aluminum tubing

RUR48 SIGN

- Panel- Reflective vinyl, 48" x 48"
- Crossbrace- Vertical member is 3/8" th. x 1-1/4" w x 66-1/4" long fiberglass
- Crossbrace- Horizontal member is 3/16" th. x 1-1/4" w x 66-1/4" long fiberglass
- Flags- 18" x 18" vinyl with 1/8" th. x 1" w x 30" fiberglass staff



#2d - UF2000W / FS2000W Side by Side Comparison

