



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

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

October 22, 2010

In Reply Refer To:  
HSSI/WZ-250B

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

Dear Mr. Pasakarnis:

This is in response to your February 10 correspondence requesting the Federal Highway Administration's (FHWA) acceptance of your company's DL1008-SM and SDL1008-SM sign stands as crashworthy traffic control devices 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 that the differences between these stands and previously accepted stands was the material of the masts (1-1/4 inch square steel v aluminum). You also noted that change to the mast should have negligible effect because no portion of the stands impacted near the windshield in the original crash tests. You requested that we find these devices 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



Page 1	FEDERAL HIGHWAY ADMINISTRATION OFFICE OF SAFETY DESIGN Category 2 Work Zone Device Acceptance Letter	Letter Number WZ-2503B Date 10/20/10
Contact Info	Petitioner / Developer Name and Address:  Dicke Safety Products 1201 Warren Avenue Downers Grove, IL 60515	
	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	<i>John M. Pasham</i>	
Telephone #	(630) 324-5209	
Email Address	john@dicketool.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 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:	DL1008-SM, SDL1008-SM	
	Type of Device (See page 3) X-Footprint 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: 0      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.	

Page 2	<b>FEDERAL HIGHWAY ADMINISTRATION</b> <b>OFFICE OF SAFETY DESIGN</b> <b>Category 2 Work Zone Device Acceptance Letter</b>		<b>Letter Number</b> _____ <b>Date</b> _____
	<b>Mandatory Attachments</b>		
	<b>Attachment # 1: Test data summary page(s)</b>		
	Attach. #1a	Test #	_____
	Attach. #1b	Test #	_____
	Attach. #1c	Test #	_____
	Attach. #1d	Test #	_____
Alternative	<b>Attachment # 1: Description and discussion of modification(s) to crash tested and/or accepted device.</b>		
	<b>Date:</b> _____		
	<b>Attachment # 2: PDF drawing(s) of device(s)</b>		
	Attach. #2a	Drawing Title: WZ Submittal Letter (PDF)	
		Drawing #:	_____
	Attach. #2b	Drawing Title: Stand Drawing (PDF)	
		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
		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  
 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 OFFICE OF SAFETY DESIGN		Letter Number
	Category 2 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.



## DICKE SAFETY PRODUCTS

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

February 10, 2010

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

Matt,

This enquiry is in regards to our previously accepted portable sign stands DL1008 (WZ-213) & SDL1008 (WZ-250).

The DL1008 and SDL1008 sign stands are X-legged, portable sign stands capable of displaying roll-up or rigid signs. The mast is constructed of aluminum tube 1.25 inch x 1.25 inch x 0.10 inch. The legs are constructed from aluminum tube for the DL model and steel tube for the SDL model.

Request #1:

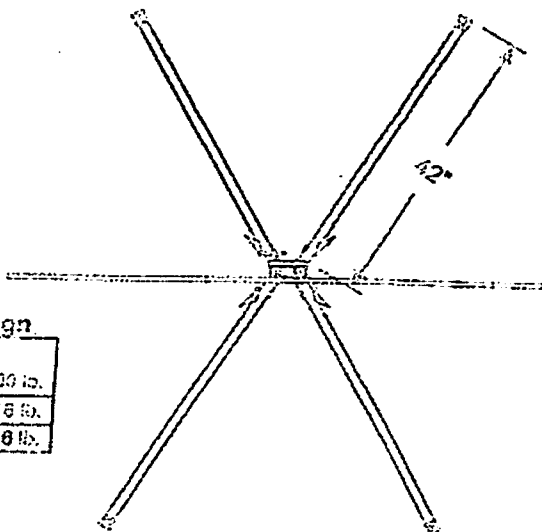
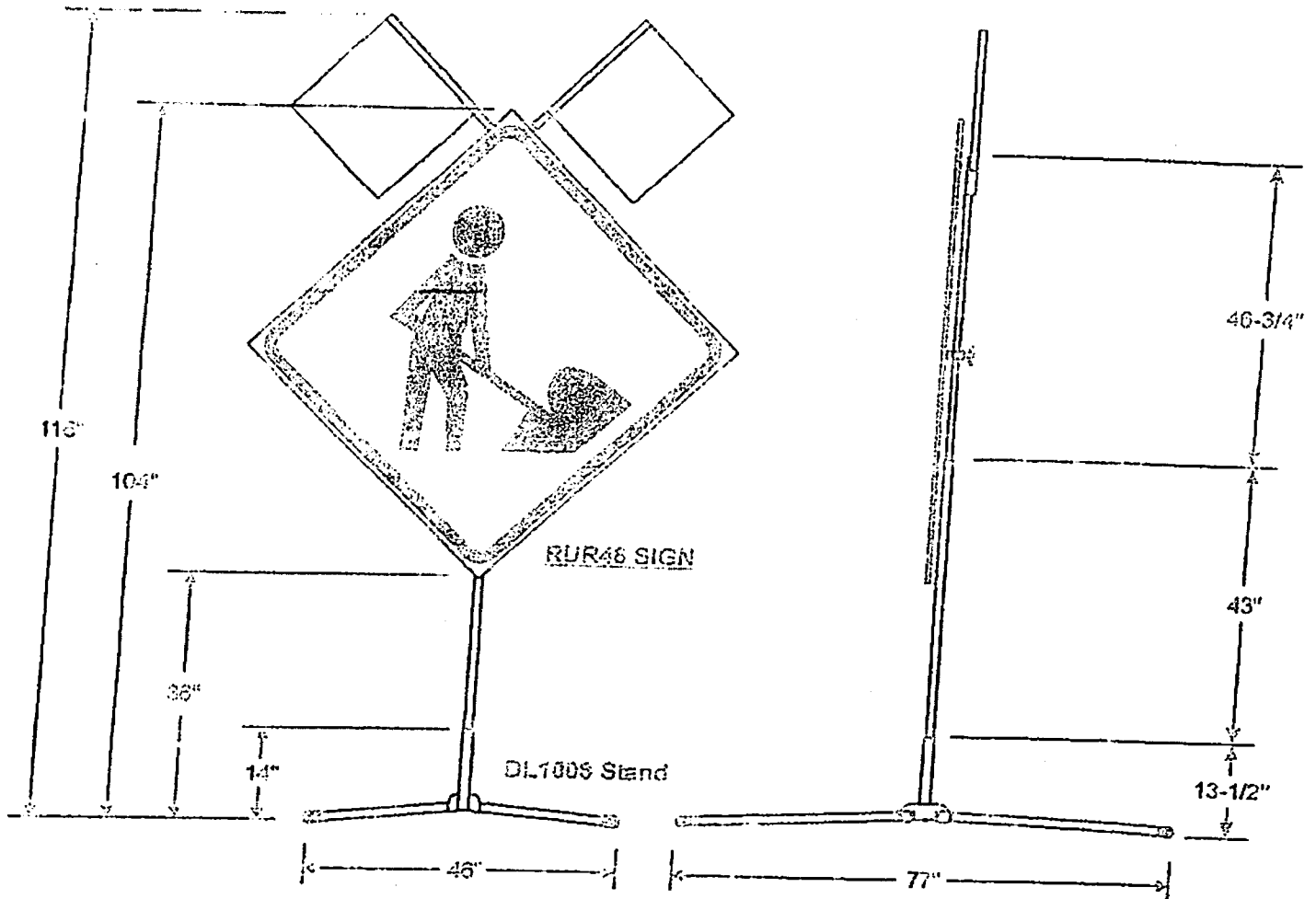
We are seeking acceptance of the DL1008 and SDL1008 with a 1.25 inch x 1.25 inch x 0.10 inch steel mast in place of the current aluminum mast. It is our contention that the slight difference in weight and physical properties of the two mast materials will have a negligible impact on the test results. This is based on the report that stated “no portion of the stand itself impacted near the windshield” during the original test. The new part numbers for these products would be: DL1008-SM and SDL1008-SM.

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

Sincerely,

John M. Pasakarnis  
Dicke Tool Company  
630-969-0050 x5209  
[john@dicke-tool.com](mailto:john@dicke-tool.com)  
[www.dicke-tool.com](http://www.dicke-tool.com)

**DL1008**  
for Roll-Up Signs



**DL1008 STAND**

- Base- Steel, no spring
- Mast- Telescoping 1-1/2", 1-1/4", and 1" sq. aluminum tubing
- Legs- 1-1/4" sq. aluminum legs

**RUR48 SIGN**

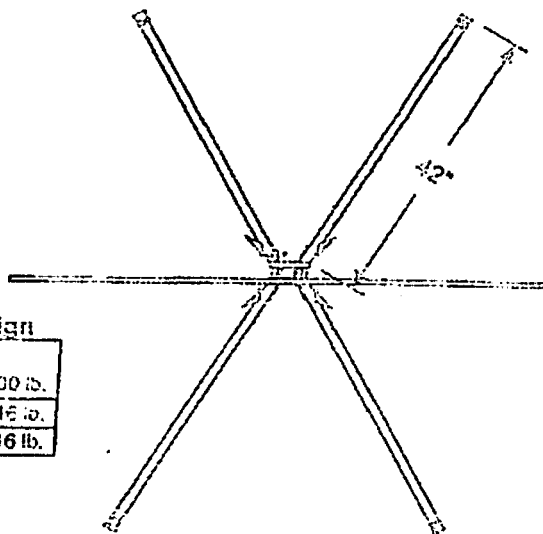
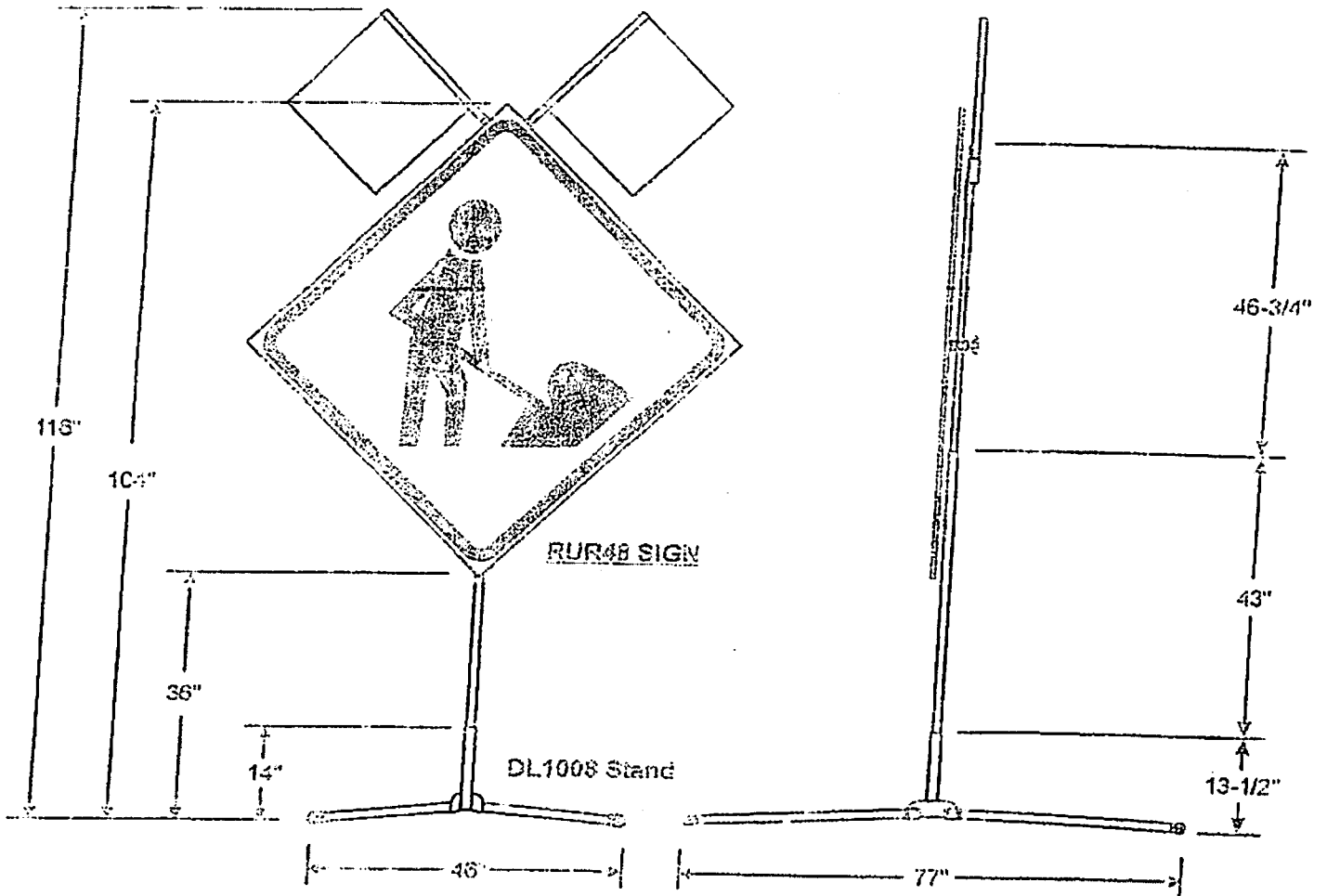
- Panel- Reflective vinyl, 46" x 48"
- Crossbrace- Vertical member is 1/4" th. x 1-1/4" w x 65" long fiberglass
- Crossbrace - Horizontal member is 3/16" th. x 1-1/4" w x 65" long fiberglass
- Flags- 18" x 18" vinyl with 3/4" rnd. x 30" wood staff

**Weight: DL1008 w/sign**

Sign, Crossbrace,	
Flags	2.09 lb.
Sign Stand	17.16 lb.
<b>Total</b>	<b>25.18 lb.</b>



**DL1008 - SM**  
for Roll-Up Signs



**DL1008 STAND**

- Base- Steel, no spring
- Mast- Telescoping 1-1/2", 1-1/4", and 1" sq. ~~aluminum~~ tubing (Steel)  $\Delta$
- Legs- 1-1/4" sq. aluminum legs

**RUR48 SIGN**

- Panel- Reflective vinyl, 48" x 48"
- Crossbrace- Vertical member is 1/4" th. x 1-1/4" w x 65" long fiberglass
- Crossbrace - Horizontal member is 3/16" th. x 1-1/4" w x 65" long fiberglass
- Flags- 18" x 18" vinyl with 3/4" md. x 30" wood staff

**Weight: DL1008 w/sign**

Sign, Crossbrace,	
Flags	8.00 lb.
Sign Stand	17.16 lb.
<b>Total</b>	<b>25.16 lb.</b>

