



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-141A

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

Dear Mr. Pasakarnis:

This is in response to your July 23, 2009, correspondence requesting the Federal Highway Administration's (FHWA) acceptance of your company's sign stand, model number UF2000T, 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 revising the FHWA Acceptance letter WZ-141 (including reference to WZ-17, WZ-25, and WZ-50) to include updated detail drawings of the UF2000T portable sign stand. This modification to the base of the UF2000 involves the addition of a tube receptor in-place of the current u-bracket to be compatible with the sign mast of the QFV-48. This minor modification in design that combines the UF2000 base with the QFV-48 sign mast will be model UF2000T. This modification will not adversely affect the crashworthy performance of this device and it is acceptable for use on the NHS.

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

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

July 23, 2009

Matt,

Enclosed is information regarding two of our previously accepted portable sign stands UF2000 (WZ-25, 50, 141) and QFV-48 (WZ-17). I am submitting drawings, photos and catalog cuts that show a minor change we need to make to the base of the UF2000. Our goal is to create a new stand that will be compatible with the sign mast of the QFV-48. There are no other changes to the legs and base, so the part number for this new product will be UF2000T.

The basic change involves the addition of a tube receptor (similar to that on the QFV-48) onto the UF2000 spring, in place of the current U-bracket. As stated above, when the QFV sign mast is inserted into this tube receptor the bottom of the removable sign mast will be located at the same dimension above ground as the approved stands. In turn, this means that the top of the sign mast will also still be at the same height as the approved stands.

Upon your review of this information we request acceptance of this new stand (UF2000T), based on the fact that the only discernable change is located below bumper height.

Request #1:

We are seeking acceptance of the UF2000T for the same criteria as the UF2000 and the QFV-48.

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

Page 1	FEDERAL HIGHWAY ADMINISTRATION OFFICE OF SAFETY DESIGN	Letter Number
	Category 2 Work Zone Device Acceptance Letter	WZ-111A
		Date <u>10/20/10</u>
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. Panchen</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:	UF 2000T	
	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) UF2000T - Combination of UF2000 and QFV-48 (see attached letter)	

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":

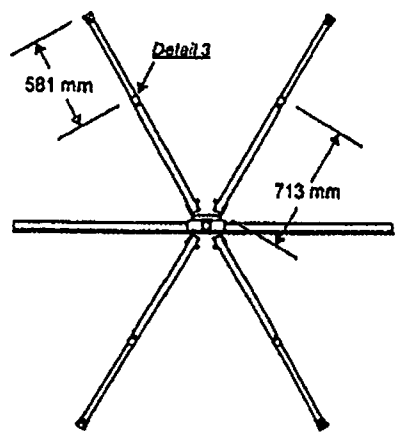
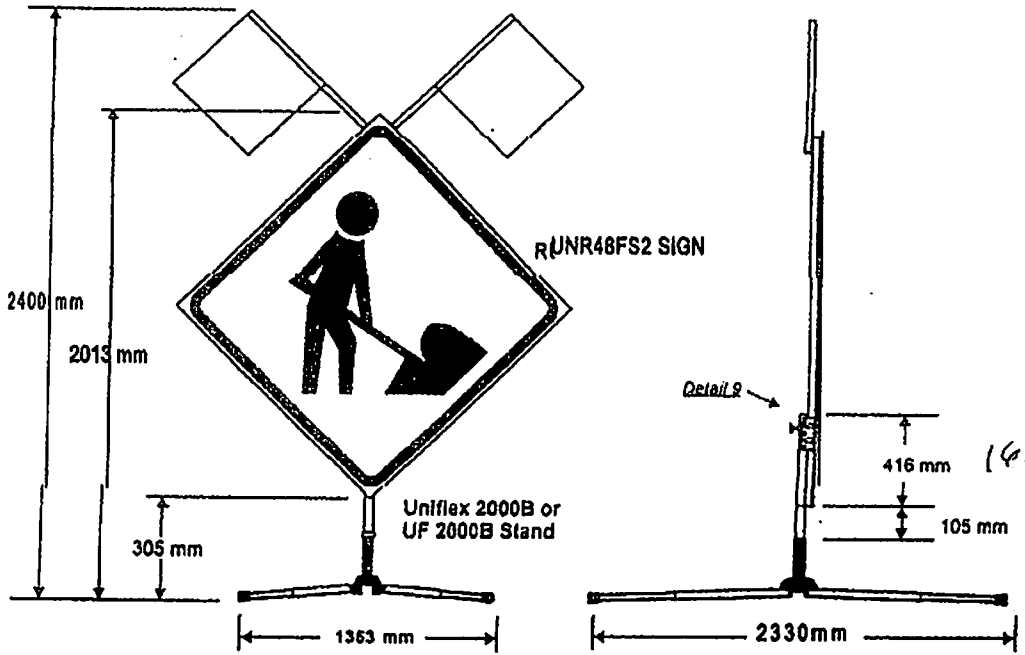
The distance to the lowest point on the sign is:

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.



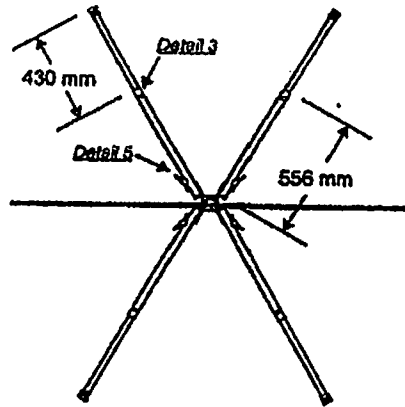
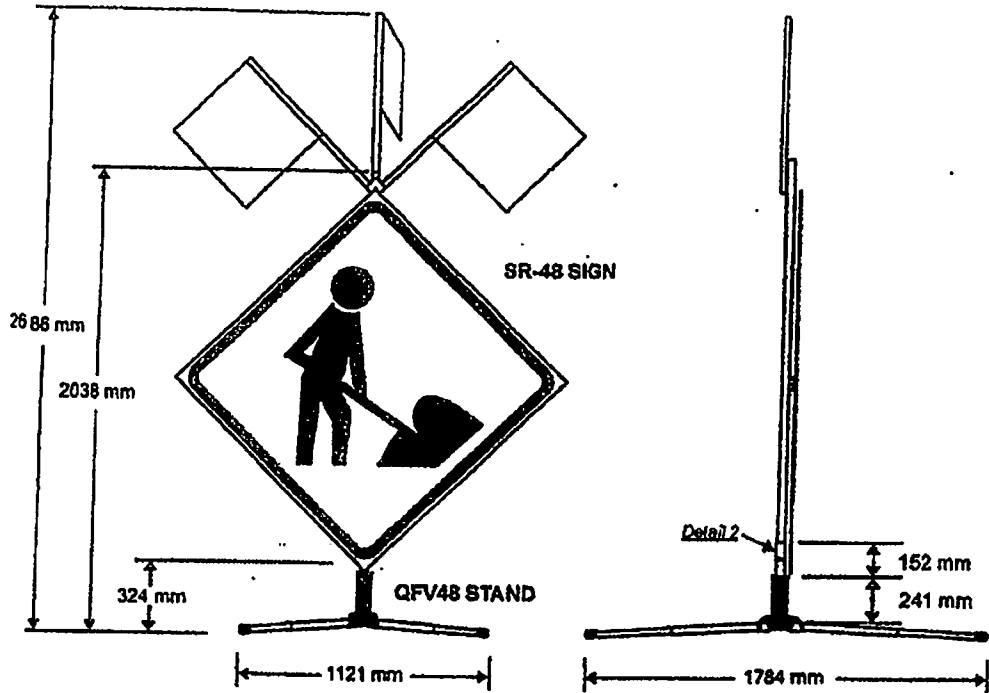
Uniflex 2000B or UF 2000B Stand

- Base- Steel with single upright spring system
- Legs- Telescopic 31.71 mm and 25.40 mm sq. aluminum tubing with 2.77 mm and 2.53 mm wall thickness, respectively

RUNR48FS2 SIGN

- Panel- Reflective vinyl, 1219 mm x 1224 mm
- Crossbrace- Vertical member is 9.55 mm th. x 30.17 mm wx 1683 mm long fiberglass
- Crossbrace- Horizontal member is 4.84 mm th. x 29.73 mm w x 1653 mm long fiberglass
- 2 Flags- 457 mm x 457 mm vinyl with 3.17 mm th. x 24.80 mm w x 587 mm long fiberglass staff

Figure 12. System No. 45 Sign Support Details, Test D-23



QFV48 STAND

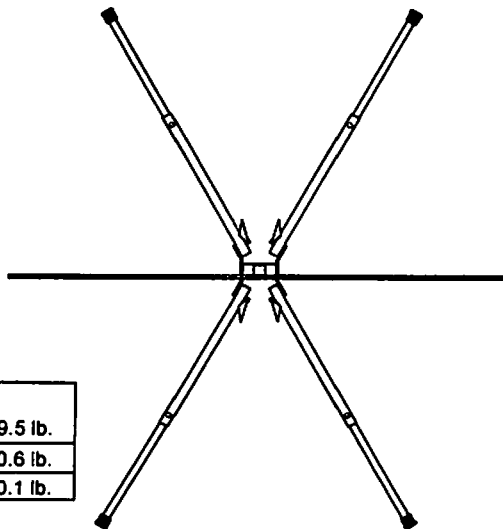
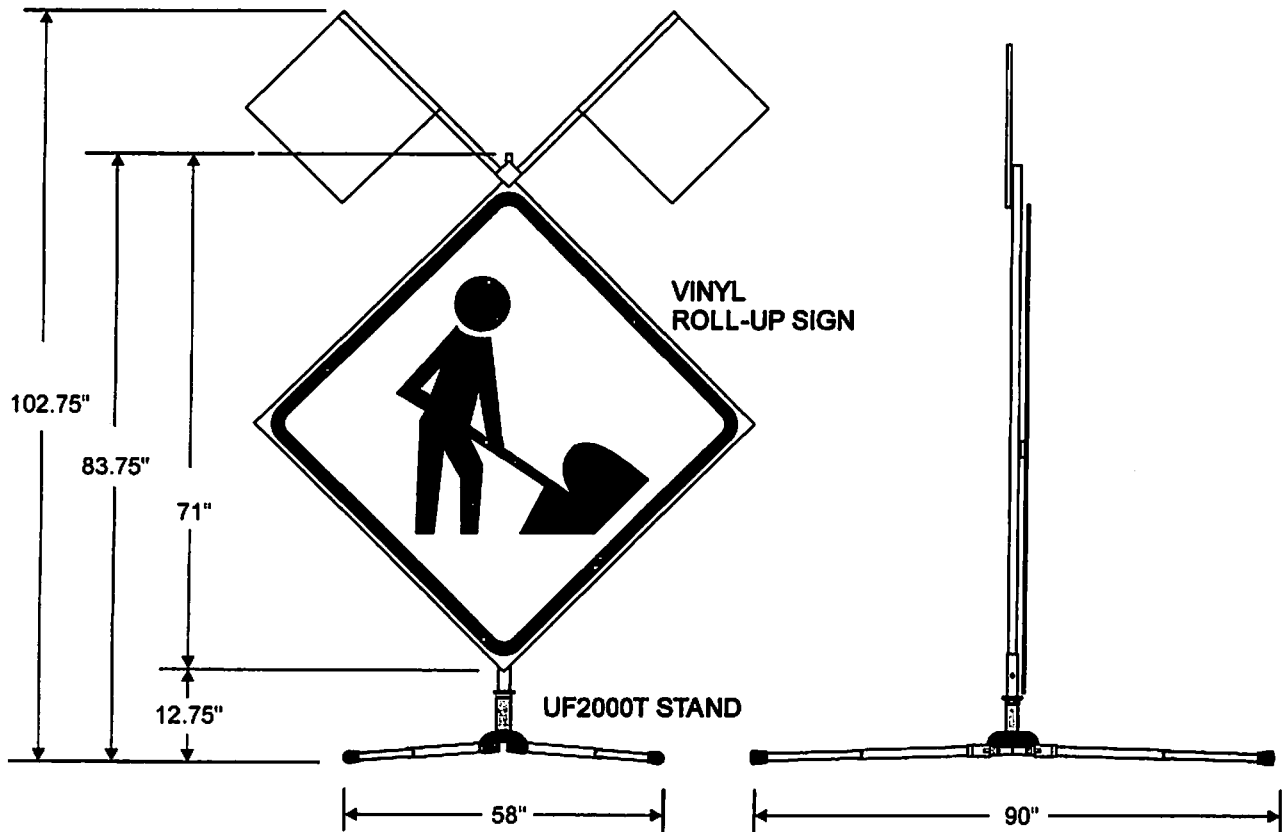
- Base- Steel with extension spring system
- Legs- Telescopic 31.75 mm and 25.30 mm sq. aluminum tubing with 2.57 mm and 2.69 mm wall thickness, respectively

SR-48 SIGN

- Reflexite – super bright
- Panel- Reflective vinyl, 1219 mm x 1219 mm
- Crossbrace- Vertical members are 31.67 mm sq. x 2.59 mm wall x 1734 mm long aluminum tube and also 4.76 mm th. x 30.73 mm w x 1654 mm long fiberglass
- Crossbrace- Horizontal member is 5.03 mm th. x 30.73 mm w x 1654 mm long fiberglass
- 3 Flags- 445 mm x 462 mm vinyl with 610 mm long (18.18 mm dia.) wood staff

Figure 27. System No. 17 Sign Support Details, Test D-9

UF2000T



Weight: UF2000T

Sign, Crossbrace, Flags	9.5 lb.
Sign Stand	20.6 lb.
Total	30.1 lb.

UF2000T STAND

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

VINYL ROLL-UP SIGN

- Panel- Reflective vinyl, 48" x 48"
- Crossbrace- Vertical member is 1-1/4" sq. x 68" long aluminum tube with .100 wall
- Crossbrace- Horizontal member is 1/4" th. x 1-1/4" w x 66-1/4" long fiberglass
- Flags- 18" x 18" vinyl with 30" staff



UF2000T



UF2000T
Base

QFV
Base



QFV
Base



UF2000T
Base



UF2000
Base

2D

UniFlex™

Single Spring Stand for Roll-Up Signs

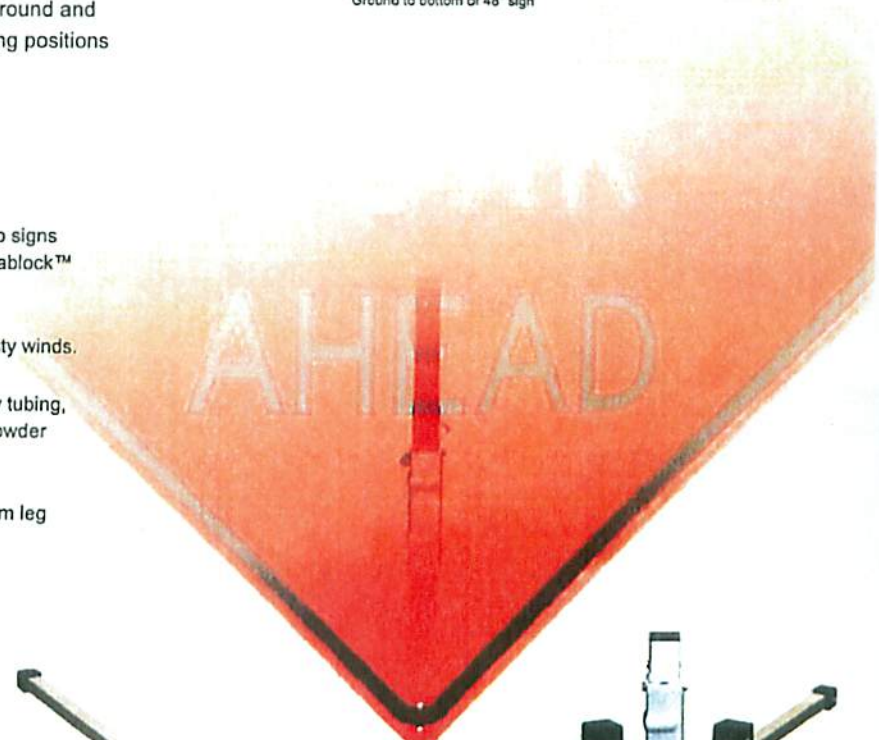
UniFlex™, our most popular compact stand, is the perfect match for 36" and 48" roll-up signs. UniFlex™ features a heavy duty steel coil spring design providing superior stability in windy conditions.

UniFlex™ stands display roll-up signs 12" off the ground and feature foot actuated kick releases with three locking positions for storage and stability on uneven terrain.

Model Number	Sign Height*	Roll-Up Sign Holder Type	Legs
UF2000W	12"	Screwlock	Aluminum
UF2000S	12"	Stablock	Aluminum
SUF2000W	12"	Screwlock	Steel
SUF2000S	12"	Stablock™	Steel

*Ground to bottom of 48" sign

- MUTCD and NCHRP-350 compliant.
- UniFlex™ compact stands offer two methods of roll-up signs attachment: Screwlock for standard roll-up signs or Stablock™ for Fold & Roll™ signs, see pg.4 for details.
- Single heavy duty steel spring provides stability in gusty winds.
- Aluminum leg models feature .100" wall aircraft quality tubing, economical 16 ga. steel leg models have an orange powder coat finish.
- Steel leg length is 22" that telescopes to 38". Aluminum leg version is 30" and telescopes to 51".



UniFlex™ spring flexes to provide stability in windy conditions.

