



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

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

August 31, 2009

In Reply Refer To:
HSSD/WZ-284

Mr. Christian Cummings
Acme Barricades LC
9800 Normandy Blvd
Jacksonville, FL 32221

Dear Mr. Cummings:

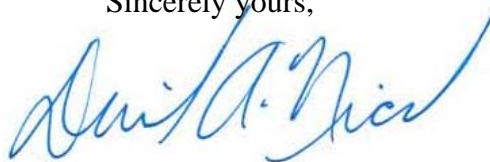
In your letter of August 10, you requested the Federal Highway Administration (FHWA) acceptance of the Acme 3PS Type III barricade as a crashworthy traffic control device for use in work zones on the National Highway System (NHS). You requested acceptance of the barricade for use with aluminum laminate sign substrate material (up to 4 mil thick) and modified the generic design of the Type III barricade accepted by FHWA in letter WZ-85. The modifications include the use of 1/8 inch thick uprights and angle iron barricade feet shortened to 48 inches. These modifications are detailed in the attached drawing.

Your request for acceptance is based on the performance of the generic Type III Barricade as accepted in FHWA letters WZ-85 and WZ-100#3. These designs are acceptable with lights securely attached to the uprights and a lightweight sign substrate (no more than 25 square feet) mounted directly to the rails. Accompanying your letter were the FHWA Office of Safety Design forms that included a drawing with a detailed description of the Acme 3PS. The drawing is enclosed for reference. You requested that we find the Acme 3PS acceptable for use as a Test Level 3 device on the NHS under the provisions of the National Cooperative Highway Research Program Report 350 "Recommended Procedures for the Safety Performance Evaluation of Highway Features".



This letter acknowledges 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,

A handwritten signature in blue ink, appearing to read "David A. Nicol". The signature is fluid and cursive, with the first name "David" and last name "Nicol" being the most prominent parts.

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

Enclosures

Page 1	FEDERAL HIGHWAY ADMINISTRATION OFFICE OF SAFETY DESIGN	Letter Number WZ-284
	Category 2 Work Zone Device Acceptance Letter	Date 8/17/09
Contact Info	Petitioner / Developer Name and Address:	
	Acme Barricades, LC 9800 Normandy Blvd Jacksonville, FL 32221	
	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>Christa Long</i>	
Telephone #	(904) 781-1950	
Email Address	ccummings@acmebarricades.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-85, 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	<i>Christa Long</i>	
Telephone #		
Email Address		
Keywords:		
	Type of Device (See page 3) Type III Barricade	
	Composition of Sign or Rail substrate (See Page 3) Extruded Plastic	
	Thickness of substrate (inches):	
	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: 2 Weight of lights: 3.30 ea.
Device Name		
Detailed Desc. Of Device, Materials, sizes, Fasteners, Substrates Foundation, Aux. Features Ballast, etc.	(May be attached on separate page(s)) The Acme 3PS is a modification to the generic Type III barricade in WZ-85 and a combination of WZ-85 and WZ-100#3. The sign substrate is aluminum laminate with a thickness of less than or equal to 4 mil and mounted directly to the rails with the height of the bottom of the sign equal to or greater than 12 in. See drawing for details.	

Page 2	FEDERAL HIGHWAY ADMINISTRATION OFFICE OF SAFETY DESIGN Category 2 Work Zone Device Acceptance Letter		Letter Number
			WZ284
			Date 8/17/09
	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:		
	Attachment # 2: PDF drawing(s) of device(s)		
	Attach. #2a	Drawing Title: Acme 3PS	
		Drawing #: 1	
	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-284
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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

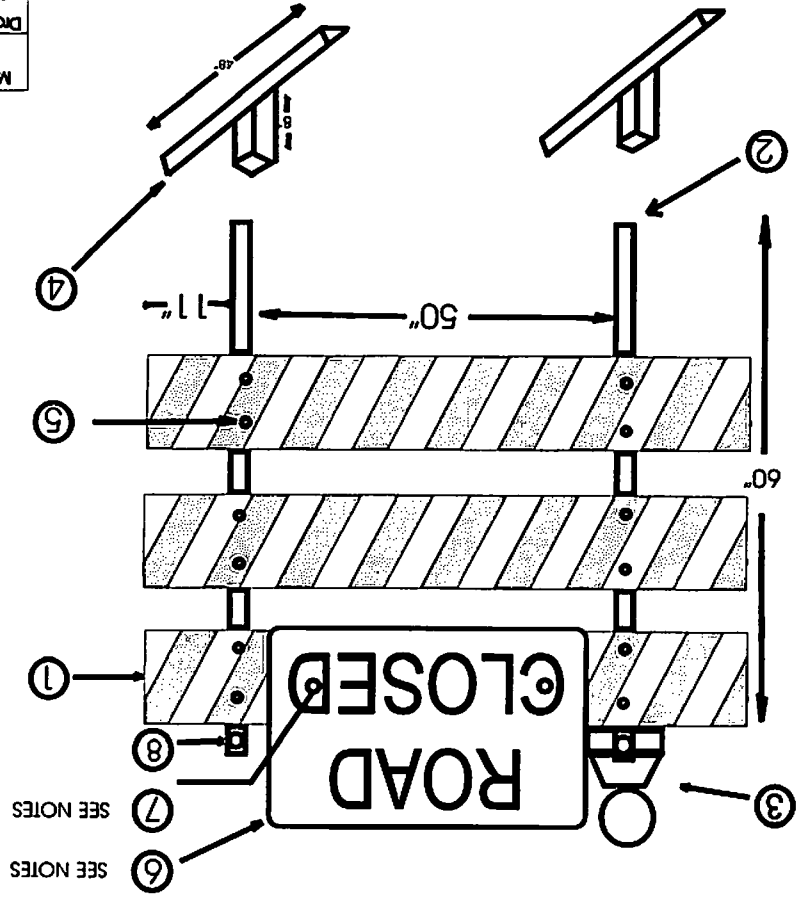
Page 4	FEDERAL HIGHWAY ADMINISTRATION OFFICE OF SAFETY DESIGN Category 2 Work Zone Device Acceptance Letter	Letter Number
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Please note the following standard provisions that apply to FHWA letters of acceptance:

- 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.

MODEL#	ACME 3PS	MANUFACTURER	ACME BARRICADES, L.C.
DRAWN BY	SCOTT CAMPBELL	PHONE #	904-781-1950
SHEET NUMBER	1 OF 1	DATE	7-30-09
TITLE	ACME 3PS		

- 1-72"x8"x1" EXTRUDED PANEL (2)
- W/APPROVED SHEETING
- 8"x72"w/6"STRIPES
- 2-63"x1 1/2"x1 1/2"x1/8" STEEL ANGLE
- BARRICADE UPRIGHTS(2)
- 3- ONE OR TWO LIGHT WEIGHT WARNING LIGHT TYPE A,B,C BOLTED TO UPRIGHT
- 4-48"x2"x2"x3/16 ANGLE A-36
- 8"x2"x2"x1/8" SQUARE TUBING
- BARRICADE FEET
- 5-TAP BOLTS 3/8"x1 3/4" ZINC(12)
- FENDER WASHERS
- 3/8"x2" ZINC(12)
- LOCK WASHERS 3/8" ZINC(12)
- NUTS 3/8" ZINC(12)
- 6-ALUMINUM LAMINATE SUBSTRATE SIGN
- 7-TYPICAL SIGN ATTACHMENT
- TAP BOLTS 1/4"x1 1/2" ZINC(2)
- FENDER WASHERS
- 1/4"x2" ZINC(2)
- LOCK WASHERS
- 1/4" ZINC(2)
- NUTS 1/4" ZINC(2)
- 8-DRILLED HOLE FOR MOUNTED LIGHT



- * ALUMINUM LAMINATE SUBSTRATE SIGN UP TO 25 SQ FT OR ANY COMBINATION OF SIGNS UP TO 25 SQ FT TOTAL
- * MOUNTING HEIGHT 12" MINIMUM FROM GROUND TO BOTTOM OF SIGN
- * SIGN BOLTED DIRECTLY TO RAIL

NOTES:

SEE NOTES
SEE NOTES