



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

400 Seventh St., S.W.
Washington, D.C. 20590

December 20, 2000

Refer to: HSA-1/SS-68F

Mr. Lawrence Leahy
President, Xcessories Squared
P.O. Box 135
Auburn, IL 62615

Dear Mr. Leahy:

This is in response to your letter of September 15 to Mr. Nicholas Artimovich of my staff requesting Federal Highway Administration (FHWA) acceptance of a variation in your company's triangular multidirectional slip base. We previously found your "SB8" breakaway slip bases acceptable for single post supports on September 18, 1996, (Geometric and Roadside Design Acceptance Letter SS-68) and for dual and triple post support on December 20, 1996, (SS-68A). These designs used triangular plates measuring 203 mm (8 inches) on a side. A 254-mm (10 inch) version for use on single posts was found acceptable by our letter "SS-68D" dated February 22, 1999. A minor modification to the 10-inch version was accepted by our letter "SS-68E) dated December 9, 1999.

In the currently acceptable design the triangular base plate is welded to a 216-mm (8.5-inch) long, 63.5-mm (2.5 inch) square stub. This assembly is then bolted into a large perforated square stub post. The upper slip plate has two steel angles welded on top, which accept 76.2-mm (3-inch) square steel tube sign post system. Your current request is for an identical breakaway design except that the top half of the system is the same as the bottom – a 216 mm long x 63.5 mm square stub. Because the welded connection of the base plate to the anchor is comparable to the welds in the upper slip plate, it appears that it will perform as an upper slip plate as well as the currently acceptable design. Therefore, square tube supports using your company's triangular slip base with the "base plate" assembly used for the upper slip plate as well are acceptable for use on the National Highway System (NHS) within the range of conditions that the original design was tested and with the limitation you have placed on it, when requested by a State. This acceptance letter, numbered SS-68F, shall not be reproduced except in full.

Our acceptance is limited to the breakaway characteristics of the supports and does not cover their structural features. Presumably, you will supply potential users with sufficient information on structural design and installation requirements to ensure proper

performance. We anticipate that the States will require certification from Xcessories Squared that the slip base hardware and posts furnished will have essentially the same chemistry, mechanical properties and geometry (except as modified for the larger size) as that used in the tests, and that they will meet the FHWA change in velocity requirements.

Your company's triangular slip bases for square steel tube supports are "proprietary" products. To be used in Federal-aid projects, except exempt, non-NHS projects: (a) must be supplied through complete bidding with equally suitable unpatented items; (b) the highway agency must certify that they are essential for synchronization with existing highway facilities for 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 was provided with earlier correspondence.

The conditions of our original letter of September 18, 1996, which found this base concept acceptable, continue to apply.

Sincerely yours,

Frederick G. Wright, Jr.
Program Manager, Safety