



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

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

December 12, 1991

Refer to: HNG-14/SS-13B

Mr. Rick Mauer  
District Sales Manager  
Marion Steel  
58 Suzanne Drive  
Portsmouth, New Hampshire 03801

Dear Mr. Mauer:

This is in response to your December 9 facsimile message to Mr. Nicholas Artimovich of my office. You requested that the Federal Highway Administration (FHWA) accept the use of a square or hexagonal threaded spacer in your company's Rib-Bak U-Channel signpost breakaway lap splice. The crash testing on the breakaway lap splice was done using pipe sections (without threads) as spacers. Our initial acceptance of the breakaway splice using spacers was on August 31, 1989. We believe that threaded spacers will work as well as non-threaded spacers and additional crash testing will not be necessary to meet the current FHWA breakaway requirements. The shape and the outside dimensions of the spacer are not significant factors and maybe adjusted to meet the needs of the customer. All other conditions in the 1989 letter remain in effect.

Therefore, installations in strong soil Marion Steel three pound-per-foot Rib-Bak posts using either threaded or non-threaded spacers within breakaway splices are acceptable for use on Federal-aid highway projects. This acceptance applies to all single, dual, or triple post installations within a 7-foot span. Since the breakaway lap splice has only been tested in "strong" soil, we recommend that it be tested in "weak" soil as well. A FHWA pooled-fund study called "Testing of Small and Large Sign Supports", does anticipate some weak soil testing of U-Channel posts with breakaway lap splices. However, this study may not have sufficient funding to conduct all the tests that are desired. At the conclusion of this study, any signpost systems not fully qualified for use in both soil types will be removed from the list of acceptable devices. Your company may wish to sponsor such testing in the near future to assure that Rib-Bak posts can continue to be used.

Sincerely yours,

L. A. Staron, Chief  
Federal-Aid and Design Division