



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

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

October 27, 1993

Refer to: HNG-14/SS-40

Mr. Ellwood Irish
Chief Engineer
Unistrut Corporation
35660 Clinton Street
Wayne, Michigan 48184-2091

Dear Mr. Irish:

Thank you for your September 24 letter to Mr. James H. Hatton, Jr., requesting acceptance of a range of your company's Telespar sign posts using a direct embedment method of installation. Our earlier letters accepted Telespar supports only when installed with a ground anchor of slightly larger size than the signpost. While my staff had discussed the matter with Mr. Henry of your organization on a number of occasions, it was our understanding that your request for acceptance would be for a single support of the size that you informally tested with your own vehicle. Our research into previous crash testing programs for perforated square tube sign supports of two different steel compositions gave us reason to believe that a single 51-mm (2-inch) square, 2.7-mm thick wall (12-gauge) Telespar post set directly into standard soil would behave in an acceptable manner. We will accept such a design without further testing.

Your request, however, was for acceptance of a dual support of that size, plus acceptance of larger size and gauge single post supports. We are not convinced that this wide range of posts should be considered acceptable in the absence of full-scale crash testing of the largest number and size of posts requested. The recently completed pooled-fund study, "Testing of Small and Large Sign Supports," taught us that minor variances in support design can cause very different results. We are, therefore, increasingly cautious when asked to approve a breakaway support unless it, or a very close variation, has been successfully crash tested. For this reason we can not respond positively to your request beyond acceptance of the direct embedment 51-mm x 2.7-mm perforated square tube support cited above.

Sincerely yours,

Lawrence A. Staron, Chief

Federal-Aid and Design Division

Geometric and Roadside Design Acceptance Letter SS-40