



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

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

May 26, 2005

In Reply Refer To: HSA-10/B-88C

Mr. Michael Kempen
Safence, Incorporated
46-04 245th Street
Douglaston, New York 11362

Dear Mr. Kempen:

In your March 23 letter addressed to Mr. Richard Powers of my staff, you requested the Federal Highway Administration approval to use an alternative steel post with all previously-accepted variations of your tensioned 4-wire rope system, the Safence 350 4RI. To support this request, you included an analysis made for Mr. Mats Heinevik of Blue Systems AB by the consulting firm CorrOcean AB that compared the crash test results of two barrier installations, one of which used the original I-posts and one of which used the proposed C-posts. This analysis also presented a comparison of the bending strengths of each post along its strong and weak axis.

After reviewing the initial information, Mr. Powers requested copies of the crash test reports and videos for the two comparative tests. These were received on May 19. Both test reports had been prepared by the VTI test laboratory in Linkoping, Sweden under the direction of Mr. Jan Wenall. Both tests were essentially identical and conducted as CEN test TB32. A 1500-kg car impacted the test installation at 110 km/h and at a 20-degree angle. The only difference between the tests was that one used the original I-posts and the other substituted the C-posts. Test results, including barrier deflection and impact severity measurements, were virtually the same in both tests. Whereas the I-post was a hot-rolled section, the C-post is a cold-rolled design made from 4-mm thick ASTM A36 steel and galvanized after fabrication as per ASTM A123.

Based on staff review of the information you provided, I agree that the C-post, as described above and shown in the enclosure to this letter, may be used as an alternative to the I-post that was previously accepted for use with your 4-strand Safence 350. Since this product is made from steel and is proprietary, the provisions of Sections 635.410 (Buy America) and 635.411



(Use of Proprietary Products) of Title 23 Code of Federal Regulations, copies of which have been previously sent to you, remain applicable to the Safence 350 4RI design.

Sincerely yours,

/original signed by/

John R. Baxter, P.E.
Director, Office of Safety Design
Office of Safety

Enclosure

