U.S. Department
Of Transportation
Federal Highway
Administration

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

September 9, 1996

Refer to: HNG-14/SS-67

Mr. David Voit
Regional Manager
Franklin Industries
P.O. Box 671
Franklin, Pennsylvania 16323

Dear Mr. Voit

This is in response to your facsimile message of August 1 to Mr. Nicholas Artimovich requesting acceptance of your company's flanged-channel posts for use in breakaway sign supports in accordance with the National Cooperative Highway Research Program (NCHRP) Report 350 Recommended Procedures for the Safety Performance Evaluation of Highway Features. In response to our request, additional information on the certification of the steel used was sent on August 27.

The adoption of the NCHRP Report 350 did not affect breakaway supports that had already been found acceptable by the Federal Highway Administration. The requirements for breakaway supports are those in the American Association of State Highway and Transportation Officials' (AASHTO) Standard Specifications for Structural Supports for Highway Signs, Luminaries, and Traffic Signals.

As your company will be producing flanged-channel supports of the same re-rolled rail steel meeting ASTM A499 Grade 60 requirements, and coming from rails weighing more than 91 pounds per yard (37.74 kg/meter), they will continue to be acceptable in the configurations that have previously been crash tested for similar Grade 60 flanged-channel supports. A table summarizing the acceptable supports is shown here:

GARDAL # and Date (a)	Max Post Sizes (b)	Breakaway Feature (c)	Max Number of Posts (d)	Soils (e)
SS-5 6/15/87	4.5 kg/m	Direct bury	2	Strong only
SS-9 3/16/89	6.0 kg/m	EZE-Erect	1	Strong/weak
SS-28 5/26/92	6.0 kg/m	Florida Spice	1	Strong/weak
SS-59 3/7/96	6.0 kg/m	Franklin Splice	3	Strong/weak*

Notes:

a) GARDAL: Geometric and Roadside Design Acceptance Letter. A copy of each is enclosed for your information.
b) Maximum size of post permitted. The 4.5 kg/m = 3 lb/ft. 6.0 kg/m = 4 lb/ft.
c) Direct Bury means an unspliced post with no specially configured breakaway features.
   EZE-Erect is the strap and spacer system historically used by Franklin.
   Florida Splice is a 200-mm overlap splice with two A307, 9.5 mm x 50 mm (3/8 inch by 2 inch) bolts spaced 150 mm center to center. A spacer is used to separate the webs. The top of the stub is to be 100 mm or less above the ground.
   Franklin Splice is as shown on the enclosed copy of the drawing you included with your submission. Standard fastener hardware may be used on single-post supports but Grade 9 bolts, spaced at 100 mm, are needed for multiple post installations. The top of the stub is to be 100 mm or less above the ground.
d) This is the maximum number of breakaway posts permitted within a 2.1-m path.

*Soil plates are required on each stub when used in weak soil. .

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 Franklin Industries 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.

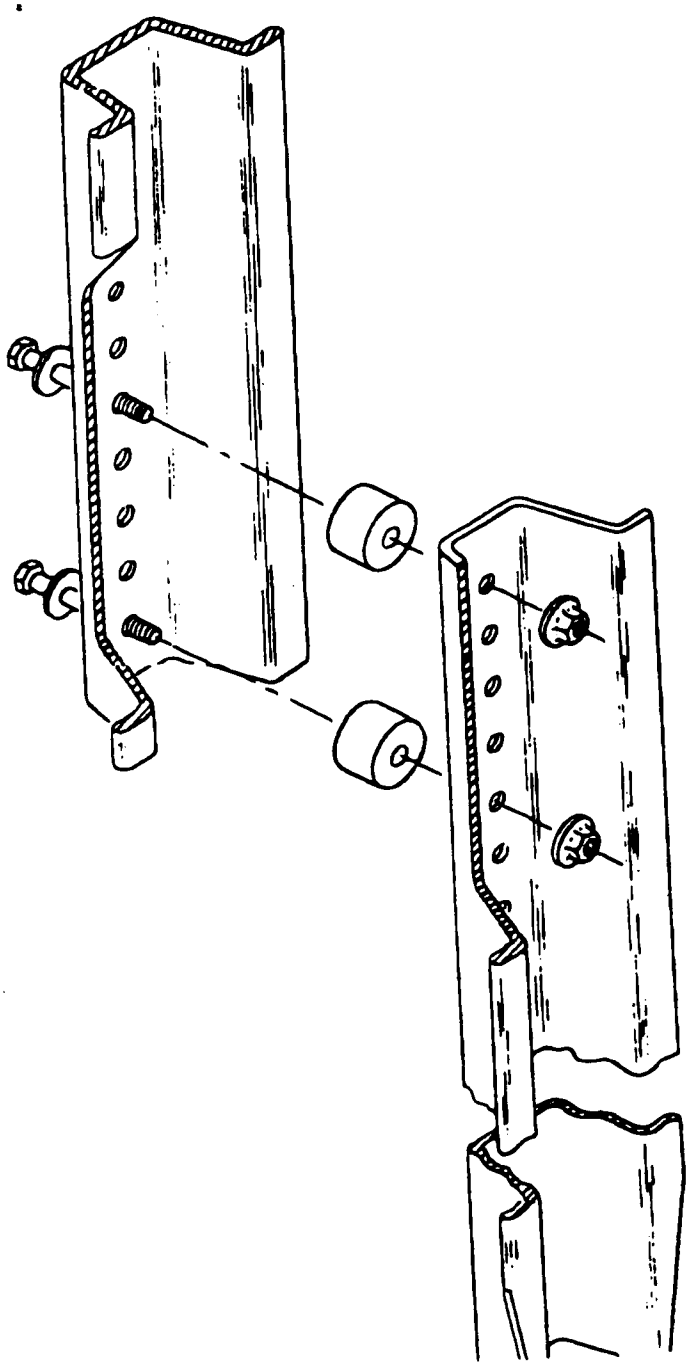
Sincerely yours,

Seppo I. Sillan, Acting Chief
Federal Aid and Design Division

Enclosures

Geometric and Safety Design Acceptance Letter SS-67

Franklin Industries



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