

9930104 OBJECT MARKERS AND DELINEATORS
COMMENTS FROM INDUSTRY REVIEW

Stefanie Maxwell, P.E.
414-4314

Comments:

993-1.4 Posts: The marker posts shall be of steel or aluminum as shown in the Design Standards or plans. Steel posts shall be 2.5 lb[#]/Ft. flanged U-Channel ~~meeting the requirements of 700-2.3.~~ *The U-channel posts shall meet the mechanical requirements of ASTM A 499, Grade 60 and meet the chemical requirements of ASTM A 1. Provide U-channel posts that have been galvanized after fabrication in accordance with ASTM A 123 and have a smooth uniform finish free from defects affecting strength, durability and appearance. For each U-channel, punch or drill 3/8 inch diameter holes on 1 inch centers through the center of the post, starting approximately 1 inch from the top and extending the full length of the post. The weight per foot of a manufacturer's U-channel size shall not vary more than plus or minus 3 1/2 % of its specified weight per foot. Machine-straighten the U-channel to a tolerance of 0.4 % of the length. U-channel posts shall be ~~are~~ listed on the OPL.*^[sdm1] Round aluminum posts shall meet the requirements of Index 11860.

Use attachment hardware (nuts, bolts, clamps, brackets, braces, etc.) of a non-corrosive metal, aluminum or steel, meeting the vendor requirements specified on the OPL drawings.

SUBARTICLE 993-2.3.1 (of the Supplemental Specifications) is deleted and the following substituted:

993-2.3.1 Posts: The ~~post shall be 1.1~~^[sdm2] lb[#]/Ft. steel U-Channel posts meeting the requirements of ~~700-2.3~~993-1.4. ^[sdm3] *The posts shall meet the requirements of 993-1.4, except that the steel delineator post shall be 1.1 lb/ft.*

sdm1: None of the object marker or non-flexible delineator posts listed on the QPL under Section 705 can be used on current jobs, why?

sdm2: Should this be 1.1 or 2.5, because you are referencing 993-1.4?

sdm3: I suggest deleting this sentence. See proposed reworded sentence.

Response:

Allen Hughes/Paul Vinik
SMO
652-955-6651

Comments:

993-1.4 Posts: The marker posts shall be of steel or aluminum as shown in the Design Standards or plans. Steel posts shall be 2.5[#]/Ft. flanged U-Channel ~~meeting the requirements of 700-2.3.~~ *The U-channel posts shall meet the mechanical requirements of ASTM A 499, Grade 60 and meet the chemical requirements of ASTM A 1. Provide U-channel posts that have been galvanized after fabrication in accordance with ASTM A 123 and have a smooth uniform finish free from defects affecting strength,*

durability and appearance. For each U-channel, punch or drill 3/8 inch diameter holes on 1 inch centers through the center of the post, starting approximately 1 inch from the top and extending the full length of the post.

This procedure needs to be done prior to galvanizing or it will compromise the galvanization and lead to material corrosion. I think this is what is intended, but I suggest wording such as drill or punch 3/8” holes prior to galvanization.

The weight per foot of a manufacturer’s U-channel size shall not vary more than plus or minus 3 1/2 % of its specified weight per foot. Machine-straighten the U-channel to a tolerance of 0.4 % of the length. U-channel posts are listed on the QPL. Round aluminum posts shall meet the requirements of Index 11860.

Use attachment hardware (nuts, bolts, clamps, brackets, braces, etc.) of a non-corrosive metal. All metals are corrosive. I suggest removing this., aluminum or steel, meeting the vendor requirements specified on the QPL drawings.

Response:

Chris Sweitzer
386-961-7418
chris.sweitzer@dot.state.fl.us

Comments:

Suggest replacing the last sentence of the proposed text in 993-1.4 with "Use only U-channel posts that are listed on the Qualified Products List (QPL)." as the proposed wording is more informational than restrictive and "QPL" is not listed in section 1-2 as an abbreviation. *** 993-2.3.1, 1.1#/Ft. posts cannot meet all the requirements of 993-1.4 as 993-1.4 states that they "...shall be 2.5#/Ft. ...".

Response:

Anjani Girwarr
D1 Assistant General Counsel
863-519-2825

Comments:

For consistency, suggest either use fractions or decimal:

The weight per foot of a manufacturer’s U-channel size shall not vary more than plus or minus 3 1/2 % of its specified weight per foot. Machine-straighten the U-channel to a tolerance of 0.4 % of the length. U-channel posts are listed on the QPL.

Response:
