

6490500-GALVANIZED STEEL STRAIN POLES, MAST ARMS & MONOTUBE  
ASSEMBLIES  
COMMENTS FROM INDUSTRY REVIEW

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Donnie Autry  
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Comments:

*Install ASTM A325 bolt, nut and washer assemblies in accordance with the following. Use bolt, nut and washer assemblies that are free of rust and corrosion and that are lubricated properly as demonstrated by being able to easily hand turn the nut on the bolt thread for its entire length. Tighten nuts to the full effort of an ironworker using an ordinary spud wrench to bring the faying surfaces of the assembly into full contact which is referred to as "snug tight." *snug tight*. After bringing the faying surfaces to a snug tight condition, tighten nuts in accordance with the turn-of-nut method in Table 460-7 of Specification Section 460-5. Maintain uniform contact pressure on the faying surfaces during snugging and turn-of-nut process, by using a bolt tightening pattern that balances the clamping force of each bolt, as closely as possible, with the equal clamping force of a companion bolt.*

~~*Use anchor bolt assemblies that are free of rust and corrosion, and lubricate these assemblies prior to installation so that the nut turns easily by hand the entire length of the bolt thread.*~~

What is "struck through" is redundant and is not needed. It is already above in the section where underlined. Also, snug tight is repeated twice (shown in blue)

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Rodney G. Powers  
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Comments:

I do not like the description of the vermin guard. I especially do not like the idea of drilling into the base plate and mixing metals.

It would seem that the vermin guard could consist of a hot-dip galvanized metal lath fashioned into a continuous ring that would encircle the anchor bolts and be just tall enough that the ring would be compressed slightly between the mast base and the foundation. The lath would be a small mesh, less than 1/4" (1/2" is too large)

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Cheryl Hudson, P.E.  
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Comments:

I'd like to suggest adding wording similar to what is in italics below. I have seen too many mast arm installations with about 6" of bolt exposed below the base plate/leveling nut.

649-5 Installation.

Install foundations for strain poles, mast arm and monotube assemblies in accordance with Section 455. Do not install the mast arm pole, strain poles or monotube pole until the foundation has cured for a minimum of seven days. Before erecting the pole clean the top of the foundation of any laitance, oils, grease or any other deleterious materials. Erect strain poles in an orientation which considering the rake and the application, cable forces will produce a plumb pole. Erect monotubes plumb at the time of installation. Plumb the pole supporting mast arms after the mast arms, traffic signals or sign panels have been placed with the bottom of the base plate a maximum of 1.5 times the diameter of the anchor bolt from the top of the foundation.

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Ray Marlin  
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Comments:

Why remove the grout pad from the specifications? Can the grout pad be left as an option?

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Larry F. Kelley, P.E., District Secretary

Comments:

The specification should include the requirement that the stand-off distance for each anchor bolt must not exceed one anchor bold diameter. The stand-off distance is measured from the top of the concrete foundation surface to the bottom of the leveling nut.

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