



Inspecting Your Sports Lighting Poles

Should you inspect your sports lighting structures? If you are planning to invest in LED lighting, does the condition of your lighting poles matter? It seems that periodic pole inspections would be a very good idea, but very few organizations perform regular inspections. ASCE Standard 72-21, *Design of Steel Lighting System Support Pole Structures*, requires periodic inspections of lighting poles be performed over the life of a pole.

The Standard recommends that a condition assessment program be initiated after

those with base plates commonly used to support lighting systems, are susceptible to fatigue cracking. The most common fatigue cracking occurs at the base flange plate weld to the pole wall. All visual inspections of poles with base flange plates supported on anchor rods should include up-close observations of the welded connection between the pole and base plate, with the primary focus on the weld toe at the pole wall. If cracks are suspected, appropriate non-destructive examination (NDE) techniques should be used to determine the extent of the crack. NDE is used to identify weld defects not readily detectable by a routine-condition assessment or visual examination of welds. Visual inspection alone, even by the most experienced inspectors, may not detect cracks that have developed or are beginning to develop. For this reason, it is recommended that NDE be performed on a pole as part of an inspection on a 3-year interval.

Inspections are required to be performed by qualified inspectors with training and experience in the visual inspection of steel poles, but are not required to be performed by a professional engineer or a certified welding inspector. However, the inspections should be performed by a qualified inspector with training and experience in the visual in-

spection of steel poles. Inspection activities, at a minimum, should include a thorough visual examination of the pole and lighting system from the ground. The visual examination is to include the use of binoculars or other means to review the full length of the pole and the lighting system. When required to gather additional information that cannot be obtained from the ground, a further examination should be performed using a lift, a drone, or by climbing the pole.

Periodic inspections are required for the early detection and mitigation of structural issues from inevitable deterioration, corrosion, vandalism, storm damage, unexpected fatigue damage, vehicular impacts, etc. This condition assessment process protects and lengthens the lifespan of your lighting poles and also protects the public. Call us today to leverage our many years of pole inspection experience on your next project.



6 months but not more than 1-year after the initial installation and on a 1-year interval thereafter. Shorter intervals may be required based on previous findings or in coastal regions, corrosive environments, or areas subject to frequent vandalism. Many slender steel pole structures, particularly


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