

# INSPECTING WOOD POLES

see: 1910.269 App D - Methods of Inspecting and Testing Wood Poles.



Whenever work needs to be performed on a wood pole, it is necessary to determine the condition of the pole. If you are going to climb it, your weight and the weight of equipment being installed should be factored in. You also need to consider other working stresses.

In the event a pole is unsafe to climb, it must be secured so that it does not fall while you are on it. This can be done by a line truck boom, ropes or by lashing a new pole alongside it. If a new pole is lashed alongside a defective pole, work should be performed from the new one.

There are some steps you should follow when inspecting a wood pole. Check for buckling at the ground line and for an unusual angle with respect to the ground. Buckling and odd angles may indicate that the pole has rotted or is broken. Inspect for cracks. Horizontal cracks perpendicular to the grain of the wood may weaken the pole. Vertical cracks, although not considered to be a sign of a defective pole, can pose a hazard to the climber.

Look for holes. Any hollow spots and woodpecker holes can reduce the strength of a wood pole. Search for shell rot and decay. Rotting and decay are cutout hazards and are possible indications of the age and internal condition of the pole. Inspect for knots. One large knot or several smaller ones at the same height on the pole may be evidence of a weak point on the pole.

Check depth of setting. Any evidence of the existence of a former ground line substantially above the existing ground level may be an indication that the pole is no longer buried to a sufficient extent. Evaluate soil conditions. Soft, wet, or loose soil may not support any changes of stress on the pole. Look for burn marks. Burning from transformer failures or conductor faults could damage the pole so that it cannot withstand mechanical stress changes.

Make sure you check the pole below ground level. Most decay occurs 18 inches below and above the ground level. After your inspection of the pole is complete, you should perform the following tests:

**Hammer Test** - hit the pole sharply with a hammer weighing about 3 pounds, starting near the ground line and continuing upwards circumferentially around the pole to a height of approximately 6 feet. It will make a clear sound and rebound sharply when striking solid wood. Decay pockets will be indicated by a dull sound or a less pronounced hammer rebound. Prod the pole as near the ground line as possible using a pole prod or a screwdriver with a blade at least 5 inches long. If substantial decay is encountered, the pole is considered unsafe.

**Rocking Test** - Apply a horizontal force to the pole and attempt to rock it back and forth in a direction perpendicular to the line. Caution must be exercised to avoid causing power lines to swing together. The force may be applied either by pushing with a pike pole or pulling with a rope. If the pole cracks during the test, it is unsafe.



## DISCUSSION QUESTION

**What is the rocking test?**

# SAFETY TALK ATTENDANCE ROSTER



COMPANY: \_\_\_\_\_ JOB/DEPT: \_\_\_\_\_

DATE: \_\_\_/\_\_\_/\_\_\_\_\_ TIME: \_\_\_\_\_

TOPICS ADDRESSED: \_\_\_\_\_

EMPLOYEE'S SIGNATURES:

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EMPLOYEE SUGGESTIONS AND RECOMMENDATIONS: \_\_\_\_\_

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ACTION TAKEN: \_\_\_\_\_

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Supervisor's Signature

\_\_\_/\_\_\_/\_\_\_  
Date

\_\_\_\_\_  
Safety Coordinator's Signature

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Date