

# CLIMB with Confidence

## All the advantages of CCA poles, plus they're easier to climb

Wolmanized® CCA poles have a number of features which make them the utility poles of choice.

**Long Life.** Wolmanized® CCA-treated poles are backed by a 50-year warranty against damage from termites and fungal decay. For details, see [www.WolmanizedWoodHD.com/poles](http://www.WolmanizedWoodHD.com/poles).

**Low Conductivity.** The Wolman® preservative used in CCA poles is an oxide, so there are no salt by-products to increase conductivity. The low conductivity of dry Wolmanized® poles provides protection against the effects of current leakage.

**Low Corrosivity.** Corrosion of hardware – galvanized bolts, metal pole steps, and lag screws – has not been a problem. Fasteners meeting ASTM A 153 are recommended.

**Strength.** Testing on full-size poles has shown the CCA treatment does not significantly affect bending strength and, in some species of wood, may even increase it slightly.

**Fixed Preservative.** Because of CCA fixation in the wood, there is virtually no migration. As a result, remedial groundline treatment is not required for aging poles and rotation of poles in storage is unnecessary.

**Cleanliness.** Since the preservative is carried into the wood in a water solution and is highly leach resistant, CCA poles are non-oily and non-staining to utility work crews and to children who might come in contact with them.

**Health risk assessment.** A respected environmental consulting firm, Gradient Corporation, conducted a human health risk assessment on children who play near CCA poles and workers with exposure to these poles. The assessment found that exposure to CCA-treated utility poles and adjacent soils is significantly less than the intake of naturally occurring inorganic arsenic in food or tap water.



Even though the increased use of bucket trucks in recent years has reduced the need to climb poles, gaff penetration continues to be a concern for some users. The ET® pole combines the longevity and cleanliness of CCA poles with the climbability of oil-impregnated poles. ET® poles are treated with a refined hydrocarbon oil emulsion in the outer layer of the pole following treatment with CCA. The viscous oil emulsion serves as a lubricant, making the pole easier to climb and to work on without affecting the preservative properties of the CCA treatment.



# Climbing Trials Show Value of ET® Poles

	9-Year Trial 1997	14-Year Trial A 2002	14-Year Trial B 2002	20-Year Trial 2008	23-Year Trial 2011	25-Year Trial 2013
CCA	4.8	5.5	4.6	5.6	5.1	5.1
Penta	7.2	7.0	—	7.6	5.7	6.9
CCA ET®	7.6	7.3	6.8	7.6	6.8	6.1

Numbers shown above represent the mean scores for climbability, as given by linemen following climbing trials. Scores are based on a 1–10 scale, with 10 being the highest rating.



All poles were installed in 1988. The 9-year evaluation was done by climbers from Carolina Power & Light; the 14-year by climbers from Georgia Power Company; 20-year by climbers from Snapping Shoals EMC, Mid-Carolina Cooperative, and EnergyUnited; the 23-year by climbers from AEP-SWEPCO, Public Service Company of Oklahoma, and AEP-Texas; and the 25-year by climbers from AEP-Ohio, AEP SWEPCO, and Snapping Shoals EMC of Georgia.



All Wolmanized® CCA-treated poles, including those with ET® emulsion, are backed by a 50-year limited warranty covering damage from termites and fungal decay.

## Life Cycle Assessment

A life cycle assessment confirmed that CCA utility poles use less energy and resources, have a reduced environmental impact, and offset fossil fuel use, when compared to concrete, steel and fiber-reinforced composite utility poles.

For warranty, report and more information, visit [WolmanizedWoodHD.com/poles](http://WolmanizedWoodHD.com/poles).

## ET® poles offer major benefits

- RUS (formerly REA) approved.
- The longevity of CCA-treated wood – resistance to termites and fungal decay for decades.
- Excellent climbing characteristics confirmed by numerous field-climbing trials on both new and aged poles.
- Eliminates need for future groundline remedial treatment, since fixation of CCA virtually eliminates preservative migration.
- Low corrosivity.
- Eliminates need to rotate poles during storage because of the emulsion’s high viscosity.
- Easier to saw, drill and nail into than regular CCA poles because the emulsion additive acts as a lubricating oil.
- Retention of oil can be readily verified by inspection agencies – a difficult task with other additives.
- Available in clear emulsion or with a brown colorant. ET® Brown is also available for ACZA-treated poles.

