



Treated wood poles have been used for a long time. So long, in fact, that their amazing benefits are often overlooked or even forgotten. These poles combine exceptional inherent features, which have evolved in nature over millions of years, with the life-extending capability of wood preservation technology.

The result of this combination is a pole with unmatched value.

## 1 **Proven and Re-proven Performance**

Wood poles and crossarms have dutifully served the nation's communications and electricity delivery systems since their inceptions. From the days of the telegraph to today's cable and fiber optic systems, wood poles have helped to improve our quality of life. The performance of wood poles and the effectiveness of wood treatment are well established; they have been demonstrated to generations of utility engineers and building contractors for more than 100 years.

## 2 **The Economical Choice**

Always a consideration, expense has become increasingly significant in this cost-conscious climate. The cost of a treated wood pole remains a bargain — the soil and sunshine provide most of the energy needed to create wood poles which are supplied by multiple, nearby, competing producers. Initial price is only one component of a product's cost; wood poles are also economical on a long-term basis. A recent, extensive life cycle analysis of all commercial alternatives — considering longevity, maintenance, hardware, disposal, etc. — concluded that "...for most overhead line applications, treated wood, compared to steel, fiberglass or concrete, remains the most cost-effective material in terms of initial costs as well as total life-cycle costs."\*

\* Utility Structure Competitive Products Report Series, Report No. 5 "Life Cycle Economics" prepared by Engineering Data Management, Inc. 1997.

## 3 **Longer Lasting** *(probably longer than you think)*

In determining the life cycle economics, the study\* found that the assumed service life of a treated wood pole greatly understates its actual life. A review of in-service records from several utilities showed that, with a responsible maintenance program, replacement averages less than 4% per decade. Thus, excluding accidents and catastrophic natural events, a typical, maintained wood pole can last 75 years or more.

## 4 **Physical Properties that Cause Envy**

The longevity and economics of treated wood poles result from the outstanding characteristics of wood. Millions of years of evolution have created a material that is strong and durable. Natural resilience enables wood to withstand wind and mechanical impacts that damage less forgiving materials. Wood also boasts both a low thermal expansion coefficient and low electrical conductivity; in the case of a utility pole, this means a thermally stable product that requires less insulating hardware. Furthermore, wood won't corrode or spall, and preservative treatment protects wood against its natural enemies, termites and fungi.

## 5 **Going Up**

Sometimes, it is necessary to climb a pole. Bucket trucks may be unavailable or unable to gain access to a pole. Wood poles allow for easy climbing, using techniques that are well understood and equipment that is common and inexpensive. Wood poles do not require special climbing hardware; linemen can quickly attach gaffs and climb without delay. And, surveys show that linemen prefer them.

## 6 **Here Today, Here Tomorrow**

Furnishing poles is not difficult when supply is large and demand is normal. However, hurricanes, ice storms, and other natural catastrophes place huge burdens on the production and distribution of poles. Wood poles have met the availability challenge. In emergency after emergency, over decade upon decade, the production channel has supplied wood poles on an accelerated schedule. Some individual pole plants can produce more than 400 poles per day and, working together in an emergency like the northeastern ice storm of 1998, the industry provided some 30,000 poles in three weeks.

## 7 **Looking Good . . . Naturally**

Aesthetics is a more subjective point, but most consumers prefer natural materials in natural surroundings. Next to forests, along tree-lined streets, across fields, and through residential neighborhoods — the natural appearance of wood makes wood poles an ideal choice for harmonizing with the environment and for minimizing neighborhood complaints about visual offensiveness.

## 8 **Kid Gloves are Not Necessary**

Wood poles are not only rugged in service, they are rugged before they are installed. The strength and resilience of wood, along with the deep penetration of the protective treatment, enables wood poles to withstand considerable abuse when being handled. Unloading is fast; special slings or equipment are rarely needed. Poles can be stored in space-saving piles. Dents and surface nicks that would impair other materials do not harm wood poles nor require repair procedures.

## 9 **Easy Maintenance, Easy Modifications**

Periodic inspection — with remedial treatment when needed — is a widely accepted, economical practice for adding decades of service life to wood poles. Most maintenance is simple and can be performed by trained utility personnel or outside contractors. Similarly, most modifications are easy. Drilling, reframing, and adding or changing hardware can be performed promptly on the spot. Remedial treatment and modifications are done in-place without removing the line from service.

## 10 **You Don't Get Much Greener**

No product is without environmental impact, but wood poles come close. They are made from a plentiful and renewable resource grown on managed timberlands. Energy requirements are low — nature generously invested most of the energy needed. Growing trees produces oxygen and wood stores carbon; wood poles help limit the accumulation of greenhouse gases. And used poles are recyclable in a variety of applications. Plus, due to the insulating properties of wood, eagles, ospreys, and other large birds are able to perch on wood crossarms without danger of electrocution.

# Ten Features Often Overlooked About the Extraordinary Wood Pole



*Treated wood poles have carried power and communications to consumers for more than a century, and treated wood poles will continue to serve us for years to come.*

*Improvements continue to be made — in conditioning processes, enhanced preservative solutions, modern treating procedures, life-extending remedial treatments, streamlined delivery methods, etc. This ensures that economical, durable, available, environmentally sound wood poles and crossarms will be the choice of the future.*

## NORTH AMERICAN WOOD POLE COALITION

American Wood Preservers Institute  
703-204-0500

Canadian Institute of Treated Wood  
613-737-4337

Southern Pressure Treaters Association  
334-968-5726

Western Red Cedar Pole Association  
800-410-1917

Western Wood Preservers Institute  
800-729-9663

*Treated wood poles:  
engineered by nature, enhanced by technology*