

INCREASE YOUR POLE LIFE BY +20 YEARS



POLESAVER™

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Disclaimer

Polesaver uses long term independent test data on the effectiveness of barrier sleeves and fire protection fabric to reach all the conclusions given in this brochure (test data available on request). Based on this data, Polesaver believes longer life, maintenance of strength over time, improved safety and reliability, extended inspection periods and reduced maintenance requirements are reasonable claims. This is subject to Polesaver products being correctly applied as per our instructions and used on correctly preservative treated (for long term in-ground use - use class 4 or higher) wooden utility poles that are free of decay at the time of sleeve application. The claims made, real or implied are not warranties. It is the responsibility of the user to evaluate and satisfy themselves that the performance of the product meets their specific safety, reliability, extended inspection, repair and any other performance or cost-benefit criteria before using Polesaver sleeves or fire protection fabric.

Polesaver maintains the bending moment with no loss of strength for 40 years

POLESAVER™

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INCREASE YOUR POLE LIFE BY +20 YEARS

Polesaver increases the life of your wood utility poles from the start regardless of wood treatment or species used.

Tel: +44 (0) 1452 849322

Founded over 25 years ago, Polesaver produced the first ground-line barrier sleeve protection system in 1994. Since then, we have become the largest manufacturer of ground-line barrier sleeves in the world, providing proven products to over 30 countries worldwide.

Millions of sleeves later, Polesaver has helped utility companies reduce their costs and environmental impact by increasing life of their poles from the start: fewer pole replacements significantly reduces environmental impact.

Polesaver is relied upon by utilities across the globe to protect their wooden poles from decay and fire damage. Our products reduce costs and improve grid safety and reliability whilst also significantly reducing utility companies environmental impact and CO2 emissions.

Proven in volume, long term use, our products allow the continued use of wooden poles in the face of ever-changing wood preservative legislation.

Polesaver is effective when used with all wood preservative types including: Creosote, CCA, Penta, DCOI, Copper Naphthenate and all water based copper treatments.

We believe in offering the highest level of quality, service and support to all our customers. Backed up by a policy of continual reinvestment and ISO 9001 accreditation, our standards are upheld and maintained to make sure that utilities can always rely on Polesaver.



Polesaver is a ISO 9001 Certified Manufacturer

Our Products Meet AWPA Standards

Polesaver Sleeve

Polesaver's core product is our unique, patented, non-toxic composite barrier sleeve.

Polesaver sleeves increase the life of a wood pole from the start. They allow wooden poles to perform like concrete, steel or composite poles but at a much lower cost.

- Polesaver sleeves consist of a dual-layer

barrier with an outer thermoplastic sleeve and an inner, meltable thermoplastic liner that seals the pole surface.

- On heating, the inner liner melts whilst the outer heavy duty thermoplastic sleeve shrinks down tightly onto the pole. This creates a tough, airtight and water tight seal to the pole surface.
- The resulting mechanical barrier excludes all of the factors required for wood decay to occur, whilst also inhibiting termite attack, providing Electric & Telecom Utilities with long term protection against failure at the critical ground line section of the pole.

Application and protection

The simplicity of the product, and the videos and instructions we have created to support our customers, along with on-site training and support provide post-purchase reassurance.

A simple three-step application process:

- Wrap the sleeve around the pole
- Peel off the self-adhesive tape, pull taught and stick down to the sleeve
- Heat-shrink the sleeve onto the pole to create the airtight and water tight seal

Whether you're applying on site, in field, or in a pole yard, we have a range of sleeve application equipment options from a simple blow torch through to electric infra-red application to allow quick and easy application.



Over **7 million sleeves** are in use in over **30 countries** worldwide

Problem

Moisture is lost from the section above the sleeve by air drying and warmth keeping the moisture level above the 25% threshold at which decay can start

Oxygen, moisture, decaying organisms & nutrients are present, preservative is lost by leaching = Decay starts before year 4

Oxygen levels and temperature are too low to support significant decay in this section of the pole (below sleeve)

Solution

Moisture is lost from the section above the sleeve by air drying and warmth keeping the moisture level below the 25% threshold at which decay can start

Oxygen, moisture, decaying organisms & nutrients are excluded and preservative is kept in the pole = No decay, strength is maintained over time

Oxygen levels and temperature are too low to support significant decay in this section of the pole (below sleeve)

Why Use Polesaver Sleeves?

Polesaver sleeves are low maintenance and easy to install but the benefits don't stop there. Polesaver sleeves:

- **Reduce costs** by significantly reducing pole replacement and inspections. Polesaver is a highly cost-effective long-term infrastructure improvement that reduces the requirement for inspections and pole remediation.
- **Improve safety** for line crew who have to climb poles and the public exposed to potential danger of falling poles and live cables.
- **Compatible with all wood preservatives** including CCA, Creosote, Water Based Copper, Copper in oil, Pentachlorophenol, DCOI, Copper Naphthenate.
- **Reduce CO2 emissions** by significantly reducing your pole replacement.
- Increase pole life by **+20 years** from the start. Independent testing shows no loss of strength for 40 years.
- Improve **grid/network resilience** in extreme weather conditions.



Polesaver sleeves make conventional ground line decay impossible, **ensuring no loss of strength for 40 years**

Trusted and used by:



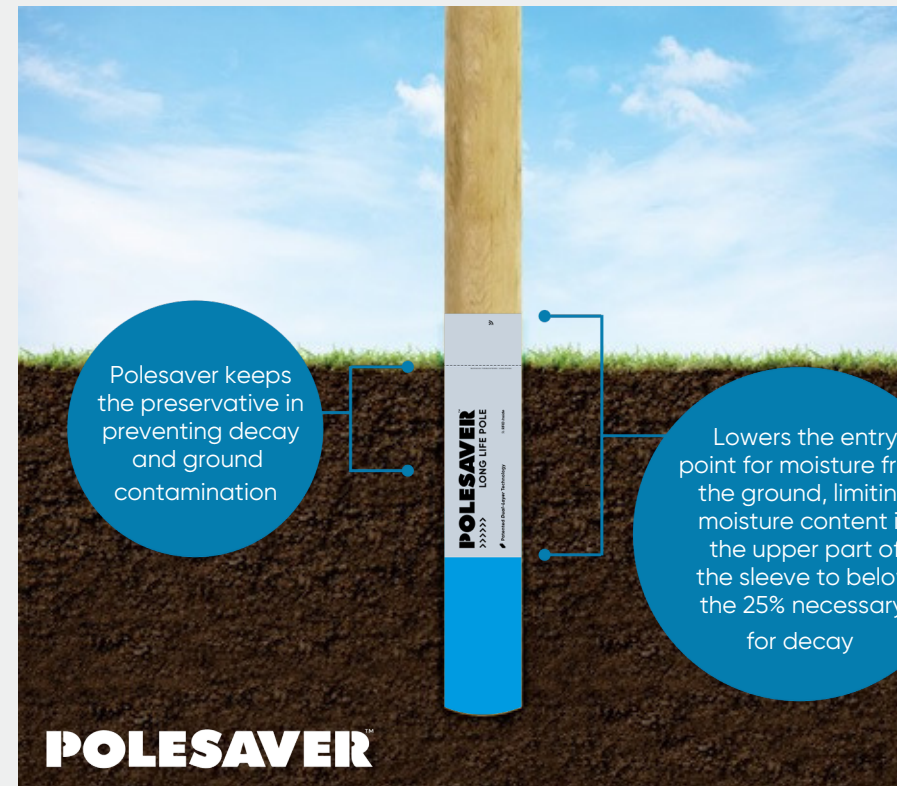


Total Protection

Polesaver: The only full barrier sleeve with total protection from decay.

Polesaver's unique dual-layer rot prevention technology provides a total air and water-tight seal to the pole surface. This seal prevents the loss of toxic wood preservatives to the ground whilst lowering the entry point for moisture, ensuring reduced rot moisture content in the upper part of the sleeve thus preventing decay at this point.

Non-toxic Polesaver sleeves make conventional ground line decay impossible, maximising pole life and maintaining strength over time for improved safety and grid/network reliability, especially in extreme weather conditions. In addition to this, Polesaver also prevents loss of persistent biotoxins to the ground significantly reducing ground contamination and potential for contamination of water courses.



Polesaver keeps the preservative in preventing decay and ground contamination

Lowers the entry point for moisture from the ground, limiting moisture content in the upper part of the sleeve to below the 25% necessary for decay

*Polesaver is not a remedial treatment. It is for use on new poles only.

The Science

Standard preservative treated poles

Ground line decay is the number one cause of premature pole failure, wood decay leads to loss of strength over time. Once this falls below the 50% strength threshold, pole replacement will be required.

Standard poles use wood preservative such as Penta, Creosote, CCA, DCOI or Copper Naphthenate are used to prevent wood decaying organisms attacking the pole.

Preservatives are effective at preventing decay but they lose effectiveness over time at the ground line section of the pole due to leaching and oxidation. Once a critical level is reached decay will start.

Lifespan and pole strength improvement from a unique, market leading product

Polesaver sleeves make conventional ground line decay impossible, maximising the life of your pole assets.

Our sleeves are the only proven and independently tested product on the market that ensure pole strength is maintained over-time at the critical ground line section, improving safety and grid reliability.

The Appeal Test confirms that there is no loss of strength for 40 years by using Polesaver from the start.*

*full test report available on request

No Loss of Strength For 40 Years

Energy Networks Association (ENA) confirms Polesaver shows no loss of strength for 40 years

A report published by Freedom, an NG Bailey group company, shows that preservative treated samples all suffered loss of strength after decay testing, whilst the preservative treated samples protected with Polesaver sleeves did not lose strength, clearly demonstrating the effectiveness of total ground line barrier sleeves.



*Full test report available on request

Approved for funding by Ofgem under the Network Innovation Allowance Scheme, the test is an extended accelerated fungal decay test offering a good correlation with real life performance. In the study, three commercially available wood preservatives are compared:

- Creosote with and without barrier sleeves
- Tanasote (copper in oil) with and without barrier sleeves
- RVP with and without barrier sleeves

Preservative Treatment	Strength (MOR) after 40 years equivalent - preservative treated only	Strength (MOR) after 40 years equivalent - preservative plus Polesaver sleeve
Creosote	84%	115%
RVP	82%	100%
TS (Tanasote)	76%	99%

Percentage loss in strength during accelerated decay tests, with and without Polesaver protection



Independent testing confirms Polesaver increases the life by +20 years from the start

Independently Proven Solution

Complying to International Standards

Polesaver sleeves have been subjected to extensive independent testing. Our sleeves have been independently proven to the following standards:

- **ENA (Energy Networks Association) Network Innovation Allowance - Project APPEAL** 'Environmentally Acceptable Wood Pole Pre-Treatment Alternatives to Creosote: Review of Potential Products and Initial Efficacy Tests.' No loss of strength for 40 years concluded.
- **AWPA E1-97, American Wood-Protection Association:** 2005. 'Standard method for laboratory evaluation to determine resistance to subterranean termites'. (Resistant to termite attack).
- **Meets the requirements of A.W.P.A.** (American Wood Protection Association) standard 'Barrier systems' P20-13, BP-1.
- **European Standard EN252:** 1989, 'Field test method for determining the relative protective effectiveness of a wood preservative in ground contact'. (20 years test - zero decay on dip treated test stakes).
- **ENV807 Wood preservatives.** 'Determination of the effectiveness against soft rotting micro-fungi and other soil inhabiting micro-organisms'. (No decay on sleeved samples and heavily suppressed moisture uptake).
- **S.A.N.S. 1634:2021** (South African National Standards Board) Barrier protection systems for preservative treated wooden poles.

Full test reports available on request.



Polesaver is an ISO 9001 Certified Manufacturer



Our Products Meet AWPA Standards



Polesaver Fire Protection Fabric

Polesaver fire protection fabric is used to protect utility poles from bush, crop, grass and wildfires.

The high-performance fabric is supplied on 1.2 metre wide rolls and can be overlapped vertically on the pole to cover any required height.

- Highly effective in protecting utility poles from low-level bush, crop and grass fires and proven in volume use.
- Polesaver Fire Fabric is highly cost effective and provides substantial cost savings by significantly reducing the need to replace poles after bush and wildfires.
- Durable enough to withstand multiple fires without requiring replacement and also protects for the long-term as the fabric is highly UV stable.
- The fabric is easy to apply by simply wrapping and stapling into place.



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