

POSTSAVER.USA

240 North Lincoln Ave. Lebanon, PA 17046



About POSTSAVER® Products

Postsaver® USA boots and sleeves offer a unique, non-toxic, revolutionary concept for protecting in-ground wood from the harmful effects of ground contact decay.

Postsaver® USA's advanced technology is laboratory proven, termite tested, and building code compliant.

Postsaver® USA's boots and sleeves are not sold separately, but applied to wood using a specialized production machine. The material you purchase arrives pre-applied to posts and poles - ready for easy installation.

Here's how Postsaver® USA products work: The vulnerable area of a post is shrink-wrapped with a heavy-duty UV stabilized polyethylene boot that has been pre-coated on the inside with bitumen (similar to asphalt). The application process melts the sticky bitumen under-layer and drives it into the wood while a tough polyethylene outer-layer shrinks tightly to encase the melted bitumen underlayer.

Postsaver® USA's boots and sleeves are very durable and designed to withstand post-driven applications in most soil substrates.

POSTSAVER® and Pressure-Treated Posts

POSTSAVER® complements pressure-treated posts by providing an environmentally-friendly barrier around the treated wood. The preservatives stay available to protect the critical ground line area where decay usually occurs. POSTSAVER® retains all the benefits of the pressuretreating process and provides additional protection.



(AWPA Standardized)

US covering product patent no. 5891583. US patent covering method of application patent no. 6033519. Canadian patent no. 2212416.

Understanding Decay

To gain a better understanding of how the POSTSAVER® system works, it is important to understand the mechanisms of decay.

Sections of a post decay at differing rates...

First Section - The area 2" above the soil-line to the top of the post is exposed to sunlight and good air circulation. This is a preferred environment for wood posts to last a long time. The above-ground wood in this area is exposed to nature's elements and is certainly subject to the natural weathering processes (simple wood protection methods may be required to maintain desired appearance).

Second Section - The area 2" above the ground to 6" through 16" below the soil-line is the most vulnerable area for post decay to occur because high moisture content combined with available oxygen and soil nutrients is most favorable for biological growth. It is at this vulnerable soil-line area that a post deteriorates rapidly. Laboratory tests prove that POSTSAVER® products eliminate decay because the elements of decay are shielded from the wood.

Third Section - Required levels of oxygen is not present for biological growth in the area 6" through 16" below the ground-line to the base of the post. Even though moisture availability is typically high at this depth, there is not enough food and oxygen to support the presence of wood destroying organisms.



Posts are shrink-wrapped by the supplier with a heavy-duty polyethylene boot coated on the inside with bitumen. The heat-shrinking process liquifies the bitumen and drives it into the wood. This provides a secondary moisture-resistant layer. The polyethylene outer layer provides the tough physical barrier.

Limited Lifetime Narranty

POSTSAVER®'s doublebarrier system is based on the use of reliable high-quality materials.

Polyethylene - A proven ground contact dampproof membrane utilized for over 50 years.

Bitumen - A protective wood coating utilized for over 1200 years.



Why should smart structures start with SmartPost®?

- Significantly increases the service life of posts.
- Provides superior resistance to wind uplift (patent pending).
- Provides superior protection from the harmful effects of:
 - Concrete
- Termites/Soil Organisms
 Corrosive Soil Agents
- Rot and Decay
 Soil Nutrients
 - Moisture/Oxygen
- Better structural performance because the posts remain dry (dry use conditions may apply).
- One piece/continuous post offers superior strength characteristics as compared to connection required alternatives.
- Available with naturally durable posts, untreated posts (for interior applications) or preservative treated posts.
- Available with all sizes of Glulams, NailLams and solid sawn posts for post frame construction applications.
- Lighter and easier to install (no special anchors required).
- No fastener corrosion on untreated posts (fastener corrosion reduced on treated posts because posts remain dry).

In order to comply with today's safer building practices, projects such as post frame construction, outdoor pavilions, backyard decks or tension posts for fencing may require POSTSAVER® USA's uplift restraint system. This proprietary technique provides structural SmartPost®s with maximum anchorage characteristics to resist post withdrawal stresses caused by natural forces such as those generated by wind load.

The uplift restraint notches are pre-applied to the post before the POSTSAVER® boot is adhered to the lumber. SmartPost®s are ready to install - eliminating the need to fabricate the typical anchoring devices on the jobsite.

Specification & Details

Electronic specification and installation details are available at www.postsaverusa.com.

Installation Instructions



For structural applications requiring building code compliance such as post-frame construction, interior or exterior support columns etc.: A minimum of 8" must be exposed from the top of the POSTSAVER® boot to the top of the exposed earth ("ground level"). If a concrete slab is installed, a minimum of 2" must be exposed from the top of the POSTSAVER® boot to the top of the concrete surface line.

For non-structural applications such as fence posts, mailbox posts, sign posts etc.:

A minimum of 2" must be exposed from the top of the POSTSAVER® boot to the top of the exposed earth ("ground level") or concrete surface line.

Important: Never puncture or cut a POSTSAVER® boot or sleeve.

Penetration of the boot material below "ground level" on the post by fasteners, bolts and nails is not permitted.

Fastener penetration into the boot material is permitted 2" above the "ground level" on the post provided there is no direct exposure to weather.



Boot vs Sleeve

POSTSAVER®'s Boot is the right choice for:

- 1. Structural applications and projects requiring the highest level of ground contact protection.
- Applications where maximum protection from subterranean termites and soil organisms are required.
- Applications where chemical migration from the wood into the soil is a concern (such as environmentally sensitive areas and agricultural settings).
- 4. Where technical opportunities exist to use above ground retention levels in ground contact applications or to enhance leachable **Decay Zone** systems (such as borates and fire retardant products).

There are many cost sensitive applications within the agricultural market and the light-duty fence industry where the use of the POSTSAVER® Sleeve may be the best choice.

POSTSAVER® Sleeves only provide double-barrier protection at the groundline zone where post deterioration usually occurs. Tests show that the POSTSAVER® Sleeve enhancement will offer many years of additional service life to in-ground posts.

Storage & Handling

When handling and storing POSTSAVER® posts, take a few simple precautions to not puncture or tear the boots and sleeves.

- Do not drop or dump POSTSAVER® products when unloading.
- Do not pick up the booted and sleeved area of the post with a forklift or crane. Mechanically handle the posts at the unbooted areas only.
- Take all normal precautions to not damage the lumber material when handling. Do not use chains to unload material.
- Protect the wooden posts by keeping them off the ground when storing on a jobsite.
- Always protect the boots and sleeves from excessive heat.
- Do not apply banding on the booted or sleeved area of the posts.

Never install a damaged postsaver boot or sleeve.

WARNING: Do not walk on the booted or sleeved area of the post to prevent product damage and to avoid accidents from slipping.

Repair Recommendations

POSTSAVER® USA recommends that posts and poles should not be installed if the boots or sleeves are punctured.

In the unlikely event that a boot or sleeve would become damaged, the bitumen under-layer does provide an effective secondary sealant that protects the wood from decay. Note that independent tests indicate a very substantial increase in post life even with 25% of the boot cut away.



Repairing a boot or sleeve is very

simple. Simply apply a self-adhering rubber roof sealing tape such as Mule-Hide Seal-Fast® or equivalent over the punctured area. It's that easy!

FAQ's

- Q Is POSTSAVER® building code compliant?
- A Yes. POSTSAVER® is listed with the International Code Council-Evaluation Service (ICC-ES). The evaluation report number is ESR-1834.

Sleeve

Boot

- Q How long will POSTSAVER® boots and sleeves last?
- A The life span of the wood will always be the limiting factor. POSTSAVER® boots and sleeves meet the highest quality standards for UV resistance and impact and tear resistance. Applications using similar products such as geo-membranes and reservoir liners have a proven service record for more than 50 years.
- Q Can I purchase POSTSAVER® boots and sleeves separately and put them on myself?
- A NO. POSTSAVER® boots and sleeves are applied on posts using a specialized production machine. The material you purchase arrives pre-applied and ready for easy installation (installation instructions).
- Q Why should I use POSTSAVER® boots and sleeves with naturally durable wood?
- A Naturally durable wood species such as cedar, redwood, locust, walnut and cypress offer very favorable appearance and functional characteristics. Although these species possess natural resistance to decay, they are only considered naturally durable if the wood is professionally graded to possess no less than 95% heartwood (the center area of a tree's trunk). It is in this heartwood area where the tree's trunk is very dense and where natural oils are stored providing natural resistance to decay. Purchasing heartwood is very costly and difficult to source, but with POSTSAVER®, you can enjoy all of the benefits and beauty of real wood with the highest level of protection against ground contact decay.
- Q Why should I use POSTSAVER® boots or sleeves if I'm already using chemically treated wood?
- A a. Chemically treated wood is an effective method to protect lumber from decay, but the chemicals may not penetrate 100% of a post. In addition, the performance of one post may differ from the performance of the next. This is why many municipalities require the use of concrete support pillars and steel base plates to separate the structural support posts from the soil. POSTSAVER® offers the highest level of protection and added assurance that your posts will provide many years of service Guaranteed!
 b. POSTSAVER®'s double-layer barrier system augments chemically treated wood by stopping the migration of chemicals into the soil in the below ground area of a post. This barrier makes good environmental sense and it significantly helps the performance of treated wood because it helps to keep the preservatives more available to resist decay.
 c. With POSTSAVER®, chemical retention levels can be reduced. The post would only need to be treated to protect against natural weathering and above ground decay.
 d. POSTSAVER®'s barrier system is environmentally smart because it allows for a reduction in the amount of chemicals required.
- Q What if the POSTSAVER® boot or sleeve is punctured?
- A POSTSAVER® boots and sleeves can be easily repaired on the jobsite with self-adhering tapes (repairing instructions).
- Q What happens if moisture gets behind the boot via a check or split? What happens if the booted or sleeved wood gets very wet?
- A Nothing. Wood has the natural ability to wick moisture out of the boots and sleeves. Five year tests in England prove that moisture is not a problem and it does rain in England!
- Q What happens to the boot or sleeve if the lumber shrinks?
- A Nothing. The barrier system is designed to expand and contract with the dimensional changes of a post.
- Q Is the Postsaver® product toxic?
- A No, toxicity is not a concern for POSTSAVER® (See Material Safety Data Sheet MSDS Sheet)
- Q Are POSTSAVER® products resistant to chemical treatments such as herbicides and post treatments?
- A Yes.