ADVANTAGE PLUS • LOSP Treated Primed Pine

Installation Information and FAQ

(The following is text from the March 2014 Product Sales and Technical Manual. There are no updates at this time.)

Kelleher Advantage Plus™

Advantage Plus™ products are a fully treated, primed fingerjointed Pine product that is strong, versatile, easy to use. Made from a renewable resource, these products withstand a wide range of climates and come with a 30 year warranty. The LOSP treatment process makes Advantage Plus safer to use and handle than other treated products. Advantage Plus carries a variety of Green building certifications. Advantage Plus products are paint ready with two factory applied coatings, durable, safe for interior and exterior use, termite resistant and defect free. All siding profiles are CAL FIRE rated. Specially formulated End Sealer, available in paint or spray, protects wood where cuts and notches are made. Finish with acrylic paint.

The LOSP Treatment Process:

The natural wood substrate is 100% Radiata Pine sourced from sustainable plantation forests. The wood is kiln dried and then has all knots, pitch pockets and other defects removed. The defect free lumber is then fingerjointed and edge glued with high quality exterior grade adhesives.

The raw wood is then treated using an LOSP treatment process. Unlike some treatment processes, this system does not puncture the wood and leave unsightly incisor marks. LOSP stands for Light Organic Solvent Preservative. The process involves three preservatives that are carried into the wood using an organic solvent and vacuum pressure treating system. The preservatives are not soluble in water so they will not leech out of the wood due to moisture. The three preservatives are divided into two functions:

Permethrin is the component that prevents termite infestation. It is EPA approved and is a component of most household termite sprays. Propiconazole and Tebuconazole are the components that prevent fungal growth (AKA dry rot). These chemicals are EPA approved and are commonly used in agriculture to prevent fungal growth on food crops. The treatment process also carries paraffin wax and hydrocarbon resin into the wood to enhance water repellent characteristics.

Advantage Plus meets requirements for H-3 (Chile and New Zealand) and UC-3A and UC-3B (USA) third party rating systems. The "H" refers to Hazard Level, and the UC refers to Use Category. The UC3-B rating is the AWPA (American Wood Preserving Association) category for above ground, exterior use. H-3 is an identical rating. The associations involved are considered the experts in the field of treated lumber. Their techniques offer the most reliable service and performance.

Factory Applied Primer:

Advantage Plus has two coats of factory applied primer. The primer is an alkyd based product specially developed for use with LOSP treated wood. The primer has a high resistance to cracking, flaking and chipping, and provides a strong base for final coat adhesion.

The primer is not a sealer and will allow some water absorption. For best results apply a topcoat before primed wood

gets heavy rain. While the preservatives will not leech out from rain contact, the wood can swell from water absorption. Once the rain stops the water will evaporate from the wood and it will shrink back to original size. This will not affect overall performance but can cause some cosmetic issues.

Installation and Finishing Information

Installation

Product should be kept off the ground and protected from the elements in a dry environment with a breathable waterproof cover that allows air to circulate. Material should be given time to acclimate to its surrounding ambient moisture level. To prevent product shrinkage on the home, it should not be installed with a moisture reading above 18%. Siding should be installed with a minimum of 8" off the ground and ends and cut edges sealed to prevent moisture uptake.

Sealing and Priming

When pre-primed material is cut during field application, the cut end must be field primed and preserved prior to installation. This frequently overlooked step is very important since moisture moves much more rapidly through the end-grain than the face of the wood. Nail holes should also be filled and preserved immediately after installation to prevent the uptake of moisture.

Factory pre-primed surfaces should be painted within 30 days of installation, or dirt, moisture and chalking may prevent bonding and shorten the life of the paint film. If the material is allowed to weather for an extended time, clean and prime all surfaces again prior to topcoat application.

Painting Advantage Plus

Painting provides the best protection for kiln-dried Advantage Plus siding, trim boards and moulding. Two coats of high quality, 100% acrylic latex paint are recommended, thus stretching and shrinking with the wood and allowing some passage of water vapor. These characteristics prevent the cracking and blistering that sometimes occurs with an oil or alkyd resin based topcoat. Primer is not intended to be used as a finish coat. Finish coats must be applied within 90 days of installation. To avoid future separation between paint coats, the second topcoat should be applied within two weeks of the first coat. If longer than 90 days, re-prime with a high-quality exterior grade primer.

Finish coats should provide a minimum thickness of 4 dry mils (2 dry mils per coat). Finish coats or topcoats can be applied to broad surfaces by roller or spray, but brush application is the superior application method, especially for the first coat. Do not use low quality oil or alkyd paints, vinyl acetate (PVA), vinyl acrylic or vinyl acetate acrylic co-polymer paints. Do not paint in wet or cold conditions. We do not recommend Finish coating below 50° F. Always follow the paint manufacturer's application guidelines when top coating. All surface and End Cuts must be primed again and final coated in place if they are exposed to weather.

When choosing the finish coat color, it is important to note the benefits of using a lighter color or shade of paint. Lighter colors reflect more heat than darker colors. Dark colors absorb heat which is another enemy of wood. Heat dries out wood and can cause shrinkage and warping. Using a light color can extend the life of sidings and fascia and is highly recommended.

Prevent Moisture Problems Before You Start

Most lumber and finish problems are caused by moisture. Woods shrink as they dry and swell when they absorb moisture. These dimensional changes can cause splitting, checking, buckling and nail popping. Extractive staining and finish performance problems are also caused by excessive moisture.

Most performance issues are preventable through proper handling and construction techniques. Proper wall construction includes a vapor barrier with a rating of 1 perm on the warm side of the wall. Water resistant building paper with a rating of at least 5 perms should be applied over exterior sheathing. Exterior sheathing should be plywood, waferboard or OSB. All siding should be 8" above ground level.

Storing Advantage Plus

Primed lumber should be stored off the ground in a covered building and out of the weather. For best results, let wood products reach an equilibrium with the local climate by storing them for at least fifteen days in a well-ventilated shelter.

STORAGE Dos

DO store wood in a garage or shed with adequate air circulation for best protection from the elements.

DO keep wood dry. If it can't be kept under a roof, protect it with a water proof cover. Make sure the cover is secure but loose enough to permit air circulation.

DO store wood off ground and protected from dirt, moisture, direct sunlight and extreme heat.

STORAGE DON'Ts

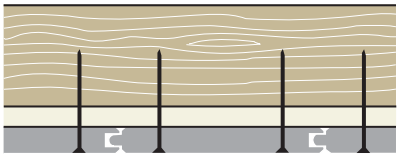
DON'T keep wood wrapped tightly in plastic covers. Loosen wrappers at job site to permit air circulation.

DON'T leave wood in the sun or covered in dark plastic. The dark cover will attract heat and cause excess drying.

DON'T let wood get wet or dirty. When storing lumber near the ground, place a plastic cover over soil to minimize moisture absorption causing shrinkage and swelling.

Recommended Nailing Methods

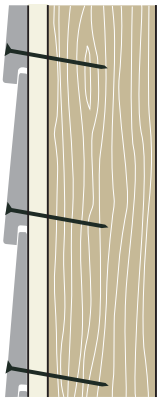
Soffit or Eaves (Overhead View)



Horizontal Siding (SIDE VIEW)

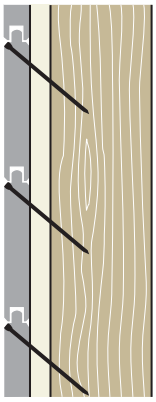
Tongue and Groove Blind-nail 4" and 6" widths through tongue with finish nails. Use one nail per bearing. For wider patterns, face nail with two nails per bearing, as in V Shiplap method.

Horizontal Siding (Side View)



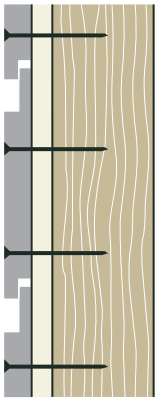
Rabbeted Bevel

Face nail with one nail only per bearing. Place nail about 1″ above lower edge of course. Position material to allow 1/8″ expansion gap at rabbet joint.



Tongue and Groove

Blind-nail 4″ and 6″ widths through tongue with finish nails. Use one nail per bearing. For wider patterns, face nail with two nails per bearing, as in V Shiplap method.



Channel Shiplap

Use one nail, 1″ from the lap, for 6″ channel shiplap. Face nail with two nails per bearing for patterns 8″ and wider. Space nails 1-1/2″ from the edge of the overlap and 2″ from the edge of the underlap. Position material to allow expansion clearance of 1/8″. Boards should be nailed to horizontal blocking installed between studs at not more than 24″ on center.

NAILING DOs

DO use non-corrosive nails to avoid nail stains; stainless steel or top quality, hot-dipped galvanized. DO use ring-shanked wood siding nails.

DO use properly sized nails. Shank should penetrate 1-1/2" into framing members or a combination of framing members and solid wood sheathing. If sheathing is not solid wood, longer nails are necessary.

DO pre-drill holes to prevent splitting when nailing mitered corners or near ends.

DO use water-resistant building paper with a rating of at least 5 perms.

DO use a wood-based sheathing.

DO use bevel cuts at half joints as this can minimize the appearance of gaps due to shrinkage.

DO spot prime trim ends prior to installation, and remember to spot prime nail locations, scuffed areas and other areas showing bare wood with a high-quality, oil-based, stain-blocking primer after installation.

DO remember that saw-textured surfaces perform better and hold finishes longer.

NAILING DON'Ts

DON'T use common iron, copper, cement-coated, electroplated or poor quality galvanized nails. These will cause stains.

DON'T use casing, finishing or other small-head nails, except for blind nailing Tongue & Groove. DON'T staple lumber. Staples do not have enough holding power.

DON'T nail through tip of undercourse on lapped siding. This causes splitting.

DON'T nail to sheathing only. This will not hold lumber in place.

30-Year Transferable Warranty

Advantage Plus is covered by a 30 year limited warranty against termites and fungal decay. This warranty guarantees replacement product will be provided if the original product becomes unserviceable due to fungal or termite attack during the warranty period. Replacement product will be supplied at the original store where purchased or the closest alternative if the original location is not available.

This warranty is transferable to future owners. Keep copies of original invoices or receipts and some end tags from the lumber for confirmation against this warranty.

Note: *This warranty is subject to following proper building standards and codes, and following the recommended installation and maintenance instructions for Advantage Plus treated wood. Deterioration due to the inherent physical properties of wood such as shrinking, swelling, warping, twisting or resin bleed are not covered. To file a claim contact the store where originally purchased, or if unavailable, the nearest Advantage Plus distributor. You will be asked to fill out a claim form, and provide your original receipt and photographs. A representative may want to review the product in question.*