



*“The ultimate choice for solid wood products – durable, stable, chemical free, and Eco friendly”*

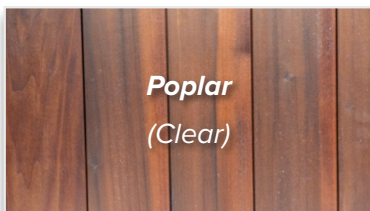
## **SOLARWOOD PRODUCT OVERVIEW & BENEFITS**



*Ash  
(Clear)*



*Southern Yellow Pine  
(Clear)*



*Poplar  
(Clear)*



*Nordic Spruce/Pine  
(Knotty)*

**SOLARWOOD™** is a sustainable wood solution enhanced through thermal modification at 413°F+. This process removes sugars and moisture-bonding sites, eliminating the need for chemicals while creating durable, dimensionally stable, rich-colored wood.

Available in Poplar, Ash, Southern Yellow Pine, & Nordic Spruce, **SOLARWOOD™** resists weather-related decay, making it ideal for siding, decking, millwork, and other exterior uses, while also fitting beautifully into interior applications.

With minimal upkeep and long service life, **SOLARWOOD™** is made in the USA and offers a greener, high-performing alternative to chemical treated wood and synthetic plastic products as well tropical hardwood like teak and ipe.

***Available in Poplar, Ash, Southern Yellow Pine, & Nordic Spruce/Pine***

# FEATURES & BENEFITS

## THERMAL MODIFICATION

**SOLARWOOD™** (thermally modified wood) products are suitable for interior and exterior applications without the need for additional chemical preservatives. Our thermal modification processes enhance our North American Hardwood's aesthetic and performance properties, caramelizing the material to warm brown through-body tones while significantly improving durability and dimensional stability.

## DIMENSIONAL STABILITY

The lowered equilibrium moisture content of TMT increases dimensional stability, allowing the material to retain its shape far better than untreated wood. This outstanding dimensional stability allows **SOLARWOOD™** products to be successfully used in all climates and environmental conditions, indoors and outdoors.

## INSTALLATION

For installation information please refer to the **SOLARWOOD™** Installation Guide. As with most hardwood cladding products, pre-drilling and high quality stainless steelscrews will be paramount for best project outcomes.

## WASTE DISPOSAL

**SOLARWOOD™** off-cuts can be disposed of in the same manner as untreated wood, including burning.

## LEACHING

Minor release of the material's natural color pigment is possible during heavy rains early in the product's lifecycle and in humid spaces like saunas and spas.

## HANDLING

Extra care must be taken during handling and installation to maintain the aesthetic consistency of the boards. Sorting and transfer should be done with support from both ends or the middle. If visible dents or scratches develop during handling, the through-body color modification allows surfaces to be sanded exposing fresh, tonally comparable wood.

## MAINTENANCE

**SOLARWOOD™** are durable and do not require maintenance, however, regular inspection and cleaning with fresh water and a soft bristle brush will help prevent and/or diagnose possible staining or other visual anomalies. Any applied surface coatings should be maintained in alignment with manufacturer recommendations.

## GLUING

Gluing **SOLARWOOD™** is possible, however the gluing and compression time may be 4-6 times longer than un-modified wood. Polyurethane based glues give the best performance outcomes according to test results.

## SURFACE COATINGS

Linseed Oil is not suitable for **SOLARWOOD™** because it enables fungal growth. Surface coatings should be applied in alignment with manufacturer guidance and will be necessary only on exposed faces and edges. Both ends should always be sealed.

## USE CLASS

**SOLARWOOD™** products are suitable for Use Class 3 applications, "situations in which the wood is above ground and exposed to the weather (particularly rain)" including cladding façade, rainscreen, decking and many other exterior applications. TMT Hardwoods are not recommended for use in direct ground contact applications.

## DURABILITY

**SOLARWOOD™** Thermally Modified White Ash and Southern Yellow Pine are classified as durability class 1 "very durable", while Thermally Modified Yellow Poplar and Nordic Spruce are classified as durability class 2-3 "durable-moderately durable". Durability is consistent throughout the piece regardless of cutting or machining.

## NON-TOXIC

**SOLARWOOD™** is a pure organic material produced using only natural methods-heat and steam-without additional chemicals.

## FIRE RATING

**SOLARWOOD™** products are fire rated to Class B, in accordance with ASTM E84.

## ACOUSTIC PROPERTIES

**SOLARWOOD™** walls, ceilings, floors, and other interior elements naturally dampen noise acting as soft, echo-reducing breaks in the space. The porous wood surface does not reflect sound in the same way as harder and artificial materials. The use of battens or Solarwood 3D profiles will further reduce ambient noise potential in the space.

## MACHINEABILITY

Processing will not affect the performance properties of **SOLARWOOD™** as the modification occurs through-body. Cut or machine using best practices for dense hardwoods, including sharp tooling and use of PPE.

## WEAR AND WEATHERING

Like all timber products, **SOLARWOOD** will go grey upon exposure to UV and moisture, and in time may show some fine cracks or splits on the surface. The greying effect will be visible in a relatively short period of time, 3 to 6 months after installation (see examples below). If maintaining the original color is desired, applying a UV-protected and color pigmented wood coating may be necessary. This surface treatment should be renewed as necessary depending on the climate, amount of usage, degree of exposure to UV-light, and in line with manufacturer recommendations.

## TRANSPORTATION AND STORAGE

**SOLARWOOD™** should be carefully transported and stored horizontally in a manner consistent with other high-quality decorative wood materials. Store material on bearers at least 3" off the ground.

**SOLARWOOD™** products and accessories must be kept clean, dry, under cover and out of the weather. Avoid exposure to UV-light as the material will begin to grey. Store Solarwood in its original packaging or completely and tightly covered under a UV-protective wrap during installation phase to avoid greying of the surface and the formation of shade differences. If fully protected storage conditions are not available, keep the material protected from weather and allow for ample airflow to mitigate trapped humidity.