

Boulevard™ Wood

Materials: Thermally Modified North American Hardwood

Tournesol's Boulevard wood starts with hardwoods (typically ash), treats it at high temperatures (up to 375°F) in a special kiln. This natural process changes the chemical make-up of the wood, creating a gorgeous dark-colored lumber with exceptional rot, pest, and decay resistance. Technically, it shares a 25-year preserved-wood-like durability level similar to South American hardwoods. The cell structure of the wood changes during the process, helping to reduce moisture absorption and making Boulevard more resistant than other hardwoods to warp, twist and other movement.



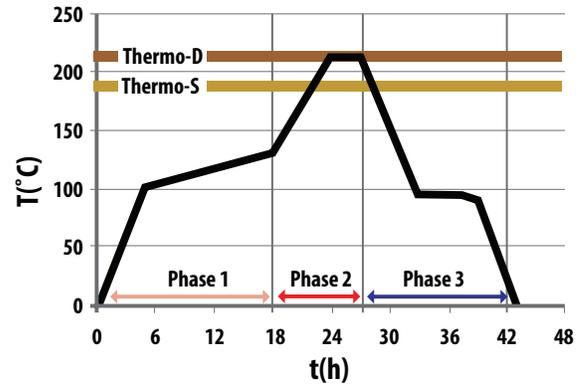
- South American hardwood-like durability, without the ecological baggage.
- Rich dark color that patinas to a natural gray unless treated
- Long-term resistance to rot and decay with no harmful chemicals.

Boulevard™ Wood Products

The Thermal-Modification Process (Courtesy of the International Thermowood Association)

Phase 1: Temperature Increase and Kiln Drying

The air temperature in the kiln is raised at a rapid speed using heat and steam to a level of around 212°F, the wood temperature follows at a similar level. Thereafter, the temperature is increased steadily to 260°F and drying takes place. Steam is used as a vapor membrane to prevent cracking of the wood. The steam also facilitates chemical changes taking place in the wood. At the end of this phase, the moisture content is reduced to almost zero.



Phase 2: Intensive Heat Treatment

During the intensive heat treatment phase, the air and wood temperature is increased to a level of 401°F. When the target level is reached, the temperature remains constant for 2 – 3 hours. Steam is used to prevent the wood from burning and cracking, and it also continues to influence the chemical changes taking place in the wood.

Phase 3: Cooling and Moisture Conditioning

The temperature is reduced using water spray systems. Conditioning and re-moisturizing takes place to bring the wood moisture content to approximately 6%. Low moisture level and altered cell structure provide long-term dimensional stability and resistance to warp, twist, and other wood movement.

Boulevard™ Wood Specifications

Color	Deep brown, will weather to silver/gray unless sealed.
Process	Pre-kilned to 10-15% moisture content, heated to 401°F to remove moisture, sugars and sap, steam added to stabilize moisture level at approx. 6%. Low moisture level and altered cell structure provides long term dimensional stability and resistance to warp, twist, and other wood movement.
Durability	UC3B (25+ years fully exposed) against rot, decay – AWP standard. Janka Hardness – 1290 (lbs-force).
Source	Domestic harvest, kilned, processed, finished and assembled.
Fire Spread Rating	Class A (ASTM E84), Standard Test Method for Surface Burning Characteristics of Building Materials: (10 min. test)
Fastening	Tournesol Siteworks strongly recommends the use of tile fastening assemblies when using Boulevard tiles with deck & paver supports. Part No. EA-TF01 is a sliding tile lock that allows for removal of two tiles at a time. Boulevard Wood can be cut, machined or modified like conventional red oak. Pre-drilling is recommended for wood fastened with conventional screws.