

Boulevard® Wood

Thermally-Modified North American Hardwoods from Tournesol Siteworks

Tournesol Siteworks takes domestic FSC-certified hardwoods (typically red oak and ash), treats them 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, preventing moisture absorption and making Boulevard resistant to warp, twist and other movement.

This technically challenging process has been proven in use for more than 10 years in Northern Europe, where they treat millions of board feet of wood annually. Our materials are harvested, processed, and finished entirely in the U.S. Boulevard Wood is lighter and easier to work than ipe, and free of the arsenic, copper, chrome or other hazardous metals present in pressure treated wood. Ask for a sample to see this incredible wood product for yourself!



- South American hardwood-like durability, without the ecological baggage.
- Domestic FSC certification, harvesting, processing and finishing
- Rich dark color that patinas to a natural gray unless treated
- Long-term dimensional stability and rot resistance with no harmful chemicals.



Boulevard Structural Wood Tiles



Northlakes Collection
featuring Boulevard wood



Sydney Collection
featuring Boulevard wood

For more information about Boulevard Wood, visit <http://tournesolsiteworks.com/boulevard.html>.



Tournesol
SITEWORKS

tournesolsiteworks.com
800.542.2282

Boulevard Wood Specifications

Color - deep brown, will weather to gray unless sealed. Penofin Hardwood Formula is our recommended sealer. Weathering starts within 1-3 months. Darker brown color (415°F) available upon request.

Durability - Certified to AWPA Use-Class UC3B, Above Ground, Exposed standard (see AWPA Guidance N for required tests), EN-350-2 standard Class 1. Both are for 25+ years, fully exposed, against rot and decay. Slight checking is acceptable, and will not affect long-term durability.

Source - FSC certified domestic harvest or UFPA certified domestic urban-sourced wood, 100% kilned, processed, and finished in U.S.A.

Janka Hardness - 1290 (lbs-force), similar to untreated red oak or ash.

Flame Spread Rating - Class A flame spread (ASTM-E84, 10 minute burn test)

Thermal Conductivity - Boulevard is 20-25% less conductive - it stays, cooler, and doesn't impart heat as quickly.

Fastening - Use stainless steel fasteners only. Pilot holes are recommended when screwing into the wood.

Clearance - Decking should have a minimum of 4" clear space below to allow for air circulation

Working Characteristics - May be cut, machined or modified like conventional wood. It is 100% natural, and does not contain hazardous chemicals. Does not require gloves for handling, nor specific dust control or dust masks.

The Thermowood® 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 vapour 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.

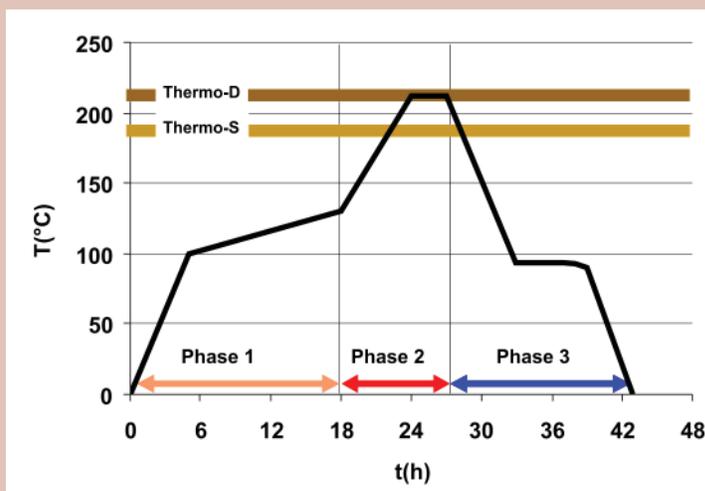
Phase 2. Intensive heat treatment

During the intensive heat treatment phase the air and wood temperature is increased to a level of 375°F, or 410°F for a darker toast. 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-moisturising takes place to bring the wood moisture content to approx. 6%

Low moisture level and altered cell structure provide long-term dimensional stability and resistance to warp, twist, and other wood movement.



The thermal-modification process

Done correctly, the process takes over three days in specially designed kilns to complete.

Unlike other providers, Tournesol Siteworks processes 100% domestically using kilns built to the guidelines of the International Thermowood Association.

Thermo-S represents our standard process at 375°F, which retains the structural characteristics and a medium wood color. Thermo-D is a darker toast, which makes the wood slightly more brittle.

For more information about Boulevard Wood, visit <http://tournesolsiteworks.com/boulevard.html>.



Tournesol
SITEWORKS

tournesolsiteworks.com
800.542.2282

Boulevard
©2014,
Tournesol Siteworks