

Structural wood deck tiles are 24" x 24" (nom.) prefabricated panels of 13/16" Brazilian hardwood slats screwed to three solid wood support battens with stainless steel screws. This results in a tile with exceptional strength, durability and resistance to flexing.

They are available in: Ipe, Cumaru, Massaranduba, and Patagonian Rosewood. We can provide FSC Certified wood pavers in: Ipe, Cumaru, Massaranduba and Canary Wood.

Structural wood tiles are specifically designed to be used with adjustable height pedestals for construction of elevated decks on rooftops or decks over sloping or uneven surfaces.

Alternatively, the tiles can be laid over existing concrete using fixed height spacers (1/2" to 1') to lift the tiles off the surface and ensure good drainage.

Structural wood tiles can be used for most commercial or residential applications including rooftop decks, elevated terraces, plazas, and other large exterior spaces.

Our structural wood tiles are exclusively constructed from Brazilian hardwood, not just because of its exceptional durability and hardness, but because of its stability across a broad temperature and humidity range and resistance to twisting and warping.



CHARACTERISTICS OF BRAZILIAN HARDWOODS

- Highly resistant to termites, decay and mold
- Very hard and dense
- Wear resistant and scuff resistant
- Class A fire rating
- High bending and shearing strength
- Resists warping and twisting
- Weathers without splintering
- Lower maintenance than less dense species

SPECIFICATIONS

Tile size	23 7/8 in x 23 7/8 in
Covered area	24 1/8 in x 24 1/8 in (1/4 in spacers)
Custom sizes.....	48 in x 24 in size available on request
Tile height	1 11/16 in
Wood thickness.....	13/16 in
Slats per tile	8
Width of slats	2 7/8 in
Slat spacing	3/16 in approx.
Ends & sides finish.....	S4S E4E (radius 1/8 in)
Tile weight	23.5 lbs
Surface finish.....	Ends waxed with paraffin, slats with machined finish, and wood not coated with oil
Common name	ipe
Botanical name	Tabebuia sp.
Color.....	Typically reddish brown color, but can vary from olive brown to blackish, often with lighter or darker striping
Grain.....	Fine to medium texture, grain always interlocked, sometimes very highly oily looking
Density @ 12% moisture.....	1050-1180 kg/m ³
Durability.....	Class A
Fire rating	Class A
Hardness (Janka).....	3680 (very hard)
Resistance to decay and insect attack	Resistant to attack by decay fungi and termites — Not resistant to marine borers
Modulus of rupture.....	170 MPa
Modulus of elasticity	21 GPa
Maximum crushing strength.....	94 MPa
Shrinkage	7% tangential, 6% radial — 1.2 tangential/radial shrinkage ratio

INSTALLATION ON ADJUSTABLE PEDESTALS

For installation on adjustable pedestals, the wood tiles are supplied with a slot cut in each corner enabling a special washer to be inserted. This washer is then invisibly screwed to the top of the pedestal to “lock down” the tiles on the pedestal, ensuring a safe, secure and level surface.

When cutting any tiles, it is very important that the structural integrity of the tile is maintained. This may require relocating one (or two) of the support battens and re-attaching these to the slats from the underside of the tile. It may also be necessary to drill and countersink additional holes when re-inserting screws.

It is also important that an adequate number of pedestals are used around the perimeter of the paved area, and that the perimeter is bounded by a low wall or some other restraining structure to prevent the tiles from moving.

We offers a range of adjustable height pedestals for use with our wood structural pavers, ensuring that they meet specified needs or requirements, taking into consideration weight loading, height, ease of installation and overall cost.

INSTALLATION ON GRADE

If installing solid wood pavers over a firm substrate such as concrete, we do not recommend laying them directly on the substrate, for the following reasons:

- If wood is allowed to remain in contact with water for extended periods, it may result in some swelling of the bearers and possibly temporary warping or twisting of the wood slats.
- Unless the tiles are all laid parallel to the slope (and not in an alternating checkerboard pattern), the bearers on the underside will prevent water flowing freely underneath the tiles.
- If the substrate is slightly uneven, the pavers could “rock” on the surface, or one or more of the edges may protrude, creating a potential tripping hazard

For best results we thus recommend laying the tiles on fixed height polypropylene pedestals (as low as 1/2” elevation) installed at each corner.

Our structural wood tiles are supplied without any factory applied oil coating. We strongly recommendation that tiles are coated with a good quality decking oil as soon as practical after installation to maintain the attractive color of the wood as long as possible, reducing the rate at which the wood will weather naturally to a silvery grey color.

Our structural wood tiles are constructed exclusively with Brazilian hardwood, which is noted not only for its stability in service but also its long life, hardness, excellent weathering properties and resistance to insect attack. Therefore the tiles can be expected to maintain their attractive appearance over a long period with minimal ongoing maintenance.

APPEARANCE

Brazilian hardwood typically exhibits variation in both color and grain which can vary both from tile to tile and within the individual slats of a single tile. These variations add to the character and overall appearance of the finished project.

STORAGE

If the tiles have been supplied on a pallet with stretch wrapping, all the plastic wrapping should be removed and the pallet left in a shaded or covered position out of direct sunlight, until the tiles are installed.

SEALING

As supplied, the wood tiles do not have any sealer or decking oil applied to the surface. However a wax is applied at the ends of the slats to minimize slight cracking or checking. If the tiles are not coated with any sealer or decking oil after installation and left to fade naturally, slight “bleeding” of the wax on the ends may give the appearance of water staining on the ends of the wood slats.

We always recommend applying a good quality sealer to the tiles as soon as practical after installation which can not only reduce the rate of fading but can to some extent help to mitigate loss of moisture on the top of the wood slats which in turn can minimize checking (small cracking) and splitting. Note that a small amount of checking and splitting can be expected as a natural occurrence in the natural weathering process.

MAINTAINING TILE COLOR

The rate at which the wood color fades will occur depends largely on the degree of exposure to direct sunlight, the climatic conditions and the frequency at which any preservative treatments are applied (ie: Ipe tiles will fade naturally to a silvery grey color if exposed to UV in sunlight).

To slow this natural fading effect and to keep the appearance of the tiles in their optimum condition, as soon as convenient after installing the tiles, we strongly recommend a good quality decking oil is applied with a brush or roller. Decking oils which contains trans-oxide pigments or other proprietary UV absorbing or reflecting compounds and have a high solids content are preferred for longer term results and extended periods between applications of the decking oil/sealant. These specialized products will help maximize the durability, beauty and value of your decking tiles and assist in maintaining the original wood color as long as possible. Some proprietary products will also provide additional protection against mold and mildew.

PERIODIC CLEANING

From time to time, it may be necessary to use a commercial cleaning product to both clean the surface of the deck and kill mold spores. Deck brightening products may also used, providing you carefully test the product in an inconspicuous area to ensure that it will achieve the results you require.

PRESSURE WASHING

A pressure washer may also be used to remove any built-up dirt, mold or mildew from the surface of the tiles. Although Ipe wood is an exceptionally hard and dense species, we recommend that you firstly test the pressure washing on an instant conspicuous area.