



# Beauty, Longevity and Exceptional Value **BISON WOOD TILES**

Constructed from responsibly harvested hardwoods, Bison Wood Tiles are crafted from premium grade remnants.

February 2015

- Species Include: Cumaru, Garapa, Ipê, Massaranduba
- Exclusive Bison FS1 Fastening Kit & Continuous Kerf Cut Design\* allows easy tile attachment, removal and replacement
- Modular sizes 2'x2', 2'x4'
- Custom sizes available

■ Commercial Grade

- FSC Certified (FSC-CO13454) species available
- Full System Warranty with Bison Pedestals
- Bison Ipê Wood Tile Systems Meet:
  - ASTM E108-07a Class A Fire Rating
  - ASTM C1028-07 Slip Resistance
  - ASTM TAS108-95 Wind Uplift
  - Seismic Design Categories (SDC) A-F







\*US #8,302,356 Patents and Patents Pending



## Installation

Bison recommends the use of Bison Deck Supports and the FS1 Fastening Kit\*\*\* when installing Bison Wood Tiles. The Bison pedestal/wood tile system installs quickly, securely and allows single tile removal after installation, if needed. The FS1 Fastening Kit, available exclusively from Bison, fastens wood tiles to the pedestals without penetrating or damaging the wood.

Place FS1 washer between the bottom rail of the tile and the upper slat. Screw FS1 screw through the FS1 washer, into center hole of spacer tabs and into pedestal. Make sure that washer secures all corners of the wood tiles and then tighten. To remove a wood tile: loosen screw and using screwdriver, rotate washer to release wood tile.

Environmental

# **Testing**

Bison Ipê Wood Tiles meet or exceed these standards.

Slip Resistance	ASTM C1028	SCOF Dry .90 and Wet .72
Solar Reflective Indices	ASTM E 1980-11	36 (Average) New 45 (Average) Weathered One Year
Solar Reflectance	ASTM C1549-09	0.321 New 0.403 Weathered One Year
Hemispherical Emittance	ASTM C1371-04a	0.894 New 0.925 Weathered One Year
Wind Uplift on Pedestals	FBC TAS-108	Aerodynamic Multiplier
Seismic	ICC ES AC-156	For use in Seismic Zones A-F with Bison Seismic System & Installation Guidelines
Fire – Flame Spread	ASTM E108-07a	Class A
Fire – Smoke Spread	ASTM E-84-08A	Class B
Fire – SF WUI Under-Flame Test	SFA 12-7-A-4 Part A	Pass
Concentrated Load on Pedestals	ICC ES AC300-2010	1250 lbs/psf FoS:3
Uniform Load on Pedestals	ICC ES AC300-2010	1250 lbs/psf FoS:3
Installation Temperature	NRCA Standard	40° F and above
Max. Bison Pedestal Height	Bison	36" with Bison Bracing

**FSC Certification** 

Note: Customer to verify acceptable uses for each project according to the presiding building code authority. All products to be installed per the most recent Bison Innovative Products specifications at the time of installation.

System

Call for Available Species



# Ipê Wood Tiles



Model: WT-IPE-24 Fire Rating: Class A\*

Species: Ipê

Surface: Smooth or Ribbed

Color: Brown \*\*

Janka Hardness Rating: 3,680 lbs. Dimensions: 23.875" x 23.875" x 1.69"

Weight: 24 lbs. Weight psf: 6 lbs.

New Bison Continuous Kerf<sup>©</sup> cut design



Model: WT-IPE-48 Fire Rating: Class A \*

Species: Ipê

Surface: Smooth or Ribbed

Color: Brown \*\*

Janka Hardness Rating: 3,680 lbs. Dimensions: 47.875" x 23.875" x

1.69"

Weight: 48 lbs. Weight psf: 6 lbs.

New Bison Continuous Kerf<sup>©</sup> cut

design

<sup>\*</sup>Meets and Exceeds ASTM E108-07a Class A Spread of Flame Test

<sup>\*\*</sup>Wood tile colors may differ than pictured above and change without notice.



# **FSC Wood Tiles**



Model: WT-FSC-IPE-24 Fire Rating: Class A\*

Species: Ipê Surface: Smooth Color: Brown\*\*

Janka Hardness Rating: 3,680 lbs.

Dimensions: 23.875" x 23.875" x 1.69"

Weight: 24 lbs. Weight psf: 6 lbs.

New Bison Continuous Kerf<sup>©</sup> cut design

# Garapa Wood Tiles



Model: WT-FSC-GARAPA-24

Species: Garapa Surface: Smooth Color: Golden brown\*\*

Janka Hardness Rating: 1,630 lbs. Dimensions: 23.875" x 23.875" x 1.69"

Weight: 24 lbs. Weight psf: 6 lbs.

New Bison Continuous Kerf<sup>©</sup> cut design



<sup>\*\*</sup>Wood tile colors may differ than pictured above and change without notice.





# Cumaru Wood Tiles



Model: WT-CUMARU-24-8

Fire Rating: Class A\*
Species: Cumaru
Surface: Smooth
Color: Golden brown\*\*

Janka Hardness Rating: 3,540 lbs. Dimensions: 23.875" x 23.875" x 1.69"

Weight: 24 lbs. Weight psf: 6 lbs.

New Bison Continuous Kerf  $^{\textcircled{0}}$  cut design

Note: Wood is a natural product and actual tile colors may differ from photo.

\*\*Wood tile colors may differ than pictured above and change without notice.

<sup>\*</sup>Meets and Exceeds ASTM E108-07a Class A Spread of Flame Test



# Ipê EcoTile

Model: WT-ECOTILE-48 Fire Rating: Class A\*

Species: Ipê
Surface: Smooth
Color: Brown \*\*

Janka Hardness Rating: 3,680 lbs. Dimensions: 47.875 x 23.875 x 1.69"

Weight: 60 lbs/tile Weight psf: 7.5 lbs/tile

New Bison Continuous Kerf<sup>©</sup> cut design

Special Purchase at Bison. We are committed to utilizing ipê remnants from other industries. So, when we had the chance to manufacture 2' x 4' ipê tiles using the "short shorts" we jumped at the chance.

### Bison ECOtiles:

- Beautiful custom look
- Exceptionally strong
- Climate tested and weathered beautifully under Colorado's hot summer sun
- Limited Availability

<sup>\*</sup>Meets and Exceeds ASTM E108-07a Class A Spread of Flame Test

<sup>\*\*</sup>Wood tile colors may differ than pictured above and change without notice.



# Semi Custom Wood Tiles



Model: WT-IPE-CUSTOM-2x4



Model: WT-IPE-CUSTOM-2x6

Bison Semi Custom Wood Tiles

Species: Ipê Surface: Smooth Color: Brown\*\*

Janka Hardness Rating: 3,680 lbs. Dimensions: 48" x 23.125" x 1.69" 72" x 23.125" x 1.69"

96" x 23.125" x 1.69"

Weight psf: 6.25 lbs.

Please inquire for availability of other wood species.



Model: WT-IPE-CUSTOM-2x8

# **Custom Wood Tiles**

Bison fully custom wood tiles can be manufactured to your specific design requirements. Contact the Bison sales team for more information.



The mark of responsible forestry

<sup>\*\*</sup>Wood tile colors may differ than pictured above and change without notice.

### Care and Maintenance

#### Wood Characteristics:

Bison Wood Tiles are made of South American hardwoods which contain a rich variety of graining and coloration and are exceptionally dense and resistant to insects. The natural shading, coloration and graining variations add to the architectural character and overall visual appeal of the finished product.

#### Storage:

Keep product out of direct sunlight until it is ready to be installed. Wood tiles should not be stored tightly wrapped in plastic. Bison wood tiles will adjust to the climate where they are installed and may have or develop some slight cracking or checking.

#### Cutting

Cutting: Carbide or diamond tipped blades are highly recommended. Bison wood tiles have a very high density and a slower feed rate is recommended when cutting tiles. In order to minimize checking (small cracks) the installer must seal any cut ends with Anchorseal® or other equivalent product. Apply sealer with a foam brush to the cut ends only, being very careful to not get any on the top surface of the wood.

### Reassembly:

To reassemble tiles after cutting, the installer must pre-drill holes from the bottom, using a carbide drill bit designed to extract stock during drilling. Exercise caution to not drill through the top surface. In addition, use only stainless steel screws which are durable and provide maximum fastening power.

#### Fastening:

Bison strongly recommends the use of Bison Deck Supports and the FS1 Fastening Kit\* (\*patent #8,302,356) when installing Bison Wood Tiles. The Bison pedestal/wood tile system installs quickly and securely and allows for removal later if required. The FS1 Fastening Kit, available exclusively from Bison, fastens wood tiles to the pedestals without penetrating or damaging the wood is sold only with Bison Wood Tiles.

### Cleaning & Sealing:

If desired, Bison Wood Tiles can be periodically cleaned and sealed. Wood stabilizers or sealants can help mitigate the loss of moisture on the top of the boards and minimize checking and splitting. The installer can lightly wax or seal the ends of the wood if desired. Note: small checks and splits are normal and a natural part of the wood. The following manufacturers offer cleaning and sealing products specifically designed for use with exotic hardwoods: Defy, Cabots, Penofin, Messmers. Important: Bison Innovative Products recommends that you test any cleaners or sealants in an inconspicuous area first before applying them to the installed deck.

### Sanding:

If you plan to seal your deck and desire a more uniform appearance, a light sanding is highly recommended. Use 80 grit sandpaper to lightly sand the wood tiles and thus reduce the appearance of any minor marks, scratches or surface imperfections. After sanding, sweep the tiles and use water to rinse away any remaining dust and allow to dry thoroughly before applying sealer. Exercise caution when sanding wood with the scuff resistent surface. Important: Always test any product you apply in an inconspicuous place to make sure it performs as you expect.

### General Safety Precautions:

Cutting, Grinding, or Sanding should be done outdoors or in a well-ventilated area. Wear safety glasses with side shields when handling, cutting, sanding, or grinding this material. Use a face shield for processes that may generate excessive dusts and splinters. Wear puncture resistant work gloves, such as leather when handling. Respirators must be worn if the ambient concentration of airborne contaminants exceeds prescribed exposure limits. Dust masks may be worn to avoid the inhalation of nuisance dust. Refer to product MSDS for more information.

#### Maintaining Tile Color:

To better maintain the rich coloration of the tiles, you can apply a penetrating oil finish with UV blocker. These products offer UV protection as well as mold and mildew protection. Before applying any finish, first clean and remove any residue from the wood tile as described above. After your initial coat is applied, an annual maintenance coat will help keep the coloration vibrant for years to come. Important: Always test any product you apply in an inconspicuous place to make sure it performs as you expect.

### Natural Aging:

Left to weather naturally and, depending on climatic conditions, Bison wood tiles will develop a silvery-gray patina. If you prefer this look, Bison recommends that a coat of wood stabilizer be applied after installation. Some products provide UV protection, allowing your wood tiles to acclimate more uniformly as weather and environmental conditions season the deck. Note: each board has unique characteristics and will weather at different rates. The amount of direct and indirect sunlight, temperature, humidity, moisture and other local conditions will factor into the time and shading of the deck. Shrinkage, cracks and changes in the wood tile is natural.

### Periodic Cleaning:

Commerical Cleaning Products: Bison recommends using a deck cleaning product which safely cleans the wood and also kills mold spores. To restore the pH balance of the deck, use a slightly acidic deck brightener. The deck tiles are ready to re-seal once they are cleaned. *Important: Always test any product you apply in an inconspicuous place to make sure it performs as you expect.* 

### Pressure Washing:

You may also use a pressure washer to remove built-up dirt, mold or mildew from your wood tiles. Caution: use the lowest PSI for the species of wood you are cleaning. A maximum of 1200 PSI is suggested for Bison Wood Tiles. Bison also recommends using a professional deck cleaning contractor. Important: Test an inconspicuous area first and be careful to use the wand in even strokes to avoid lap marks.

