



WOOD TILES

January 2018

## BEAUTY, LONGEVITY AND EXCEPTIONAL VALUE

### BISON WOOD TILES

Bison Wood Tiles offer the design flexibility to create versatile, unique outdoor spaces. Commercial grade, responsibly harvested, hardwood tiles weather well, and are available in standard and FSC® Certified species.

- Commercial Grade
- Species Include: Bamboo, Cumaru, Garapa, Ipê, Mahogany and Massaranduba
- Exclusive Bison FS-1 Fastening Kit & Continuous Kerf Cut Design\* allows easy tile attachment, removal and replacement
- Modular sizes 2' x 2', 4' x 2', and 30" x 30"
- Custom sizes available
- FSC Certified (SCS-COC-002585) 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



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## Installation

Bison recommends the use of Bison Pedestals and the FS-1 Fastening Kit<sup>†</sup> when installing Bison Wood Tiles. The Bison Pedestal/Wood Tile System installs quickly, securely, and allows single tile removal after installation, if needed. The FS-1 Fastening Kit, available exclusively from Bison, fastens wood tiles to the pedestals without penetrating or damaging the wood. Place the FS-1 washer between the bottom rail of the tile and the upper slat. Screw the FS-1 screw through the FS-1 washer, into the center hole of the tab set and into the pedestal. Make sure that the washer secures all corners of the wood tiles and then tighten. To remove a wood tile, use a screwdriver to loosen the screw and rotate the washer to release the wood tile.

## Testing

Bison Ipê Wood Tiles meet or exceed these standards.

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.

Environmental	FSC Certification	Call for Available Species
Slip Resistance	ASTM C1028	SCOF Dry .90 and Wet .72
Solar Reflective Indices	ASTM E 1980-11	45 (Average) New 36 (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 System

<sup>†</sup> US #8,302,356 Patent and Patents Pending



## Sourcing

Bison ensures that the tropical hardwoods used in all our wood tile products are harvested from sustainable sources. Bison Wood Tiles are constructed from premium grade remnants from the flooring and furniture industries that comply with strict regulations regarding extraction, milling, and transport. All Bison Wood Tiles meet the IBAMA (Brazilian Institute of Environment and Renewable Resources) requirements that show Proof of Origin and Legal Harvesting. Bison Wood Tiles also comply with US Lacey Act requirements.





## Ipê Wood Tiles



Model: WT-IPE-24-SMOOTH  
 WT-IPE-24-RIBBED  
 WT-IPE-3030-10-SMOOTH

Fire Rating: Class A\*

Species: Ipê

Color: Brown\*\*

Janka Hardness Rating: 3,680 lbs.

Dimensions: 23.875" x 23.875" x 1.69"  
 29.875" X 29.875" X 1.69"

Weight: 24 lbs. / 34 lbs.

Weight PSF: 6 PSF / 5.4 PSF

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: 47.9375" x 23.875" x 1.69"

Weight: 48 lbs.

Weight PSF: 6 PSF

Bison Continuous Kerf<sup>©</sup>  
 cut design\*\*\*

\*Meets and Exceeds ASTM E108-07a Class A Spread of Flame Test.

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

\*\*\*Patent Pending.



## Cumaru Wood Tiles



Model: WT-CUMARU-24  
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 PSF  
Bison Continuous Kerf<sup>©</sup>  
cut design\*\*\*



Model: WT-CUMARU-48  
Fire Rating: Class A\*  
Species: Cumaru  
Surface: Smooth  
Color: Golden brown\*\*  
Janka Hardness Rating: 3,540 lbs.  
Dimensions: 47.9375" x 23.875" x 1.69"  
Weight: 48 lbs.  
Weight PSF: 6 PSF  
Bison Continuous Kerf<sup>©</sup>  
cut design\*\*\*

\*Meets and Exceeds ASTM E108-07a Class A Spread of Flame Test.

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

\*\*\*Patent Pending.

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## FSC® Ipê Wood Tiles



Model: WT-FSC-100%-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 PSF  
 Bison Continuous Kerf® cut design\*\*\*

## FSC® Garapa Wood Tiles



Model: WT-FSC-100%-GARAPA-24  
 Fire Rating: Class A\*  
 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 PSF  
 Bison Continuous Kerf® cut design\*\*\*

\*Meets and Exceeds ASTM E108-07a Class A Spread of Flame Test.

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

\*\*\*Patent Pending.

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## FSC® Cumaru Wood Tiles



Model: WT-FSC-100%-CUMARU-24  
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 PSF  
Bison Continuous Kerf® cut design\*\*\*

## FSC® Massaranduba Wood Tiles



Model: WT-FSC-100%-MASS-24  
Fire Rating: Class A\*  
Species: Massaranduba  
Surface: Ribbed  
Color: Reddish brown\*\*  
Janka Hardness Rating: 3,190lbs.  
Dimensions: 23.875" x 23.875" x 1.69"  
Weight: 24 lbs.  
Weight PSF: 6 PSF  
Bison Continuous Kerf® cut design\*\*\*

\*Meets and Exceeds ASTM E108-07a Class A Spread of Flame Test.

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\*\*\*Patent Pending.

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## Mahogany Wood Tiles



Model: WT-MAHOGANY 24-5 SMOOTH

Fire Rating: Class A\*

Species: Fijian Mahogany

Surface: Smooth

Color: Golden brown\*\*

Janka Hardness Rating: 800 lbs.

Dimensions: 24.125" x 24.125" x 1.77"

Weight: 14 lbs.

Weight PSF: 3.5 PSF

Bison Continuous Kerf<sup>©</sup> cut design\*\*\*

Bison Genuine Mahogany Wood Tiles are harvested from government regulated Fijian plantations. The forests are closely regulated, adhere to strict performance requirements, are Lacey Act compliant, and are CITES exempt. The mahogany adheres to these same protocols during manufacturing in Vietnam to ensure the mahogany only comes from Fijian plantations. Bison Genuine Mahogany Wood Tiles can be easily stained to match interior flooring or to match specific color requirements.

\*Meets and Exceeds ASTM E108-07a Class A Spread of Flame Test.

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\*\*\*Patent Pending.

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## Bamboo Tiles



Model: WT-BAMBOO24-4PLANK-SMOOTH

Fire Rating: Class A\*

Species: Fused Bamboo

Surface: Smooth

Color: Dark brown\*\*

Janka Hardness Rating: 3,850 lbs.

Dimensions: 23.875" x 23.875" x 1.57"

Weight: 24.35 lbs.

Weight PSF: 6 PSF

Bison Continuous Kerf<sup>©</sup> cut design\*\*\*

Bison Bamboo Tiles are constructed from dasso.XTR Fused Bamboo<sup>®</sup> that is manufactured using dasso's patented process, which combines two stages of high heat to carbonize the bamboo, removing all of the starch and sugar, and then restructuring the bamboo, reinforcing its natural strength characteristics. The modified bamboo strands are fused together using phenolic resin - the same resin used to make bowling balls. The result is an extremely dense, durable, exterior-use product composed of 87% natural, fused strand bamboo fibers, and 13% resin. *Note: Please reference the last page of this document for care and maintenance specific to Bamboo Tiles.*

### Bamboo Tiles:

- Renewable
- Sustainable
- Durable
- Uniform Appearance

\*Meets ASTM E84-13a Class A Spread of Flame Test.

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\*\*\*Patent Pending.



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## Special Order Wood Tiles



Model: WT-IPE-72-SMOOTH

Model: WT-IPE-72-SMOOTH  
WT-IPE-96-SMOOTH

Species: Ipê

Surface: Smooth

Color: Brown\*\*

Janka Hardness Rating: 3,680 lbs.

Dimensions: 72" x 23.875" x 1.69"

96.0625" x 23.875" x 1.69"

Weight PSF: 6.25 PSF

Please inquire for availability of other wood species.



Model: WT-IPE-96-SMOOTH

## Custom Wood Tiles

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

# Care and Maintenance

## Wood Characteristics:

The majority of 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. Bison Wood Tiles should not be stored tightly wrapped in plastic. Bison Wood Tiles will adjust to the climate where they are installed and may already have, or develop, some slight cracking or checking.

## 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 dust 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.

## 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 should 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 Pedestals and the FS1 Fastening Kit\* when installing Bison Wood Tiles. The Bison Pedestal/Wood Tile system installs quickly and securely and allows for removal later if required. The FS-1 Fastening Kit\*, available exclusively from Bison, fastens wood tiles to the pedestals without penetrating or damaging the wood and is sold only with Bison Wood Tiles.

## Cleaning & Sealing:

If desired, Bison Wood Tiles can be periodically cleaned and sealed. *Important: Pay special attention to removing metal shavings or filings from wood tile surface, as there can be a reaction causing discoloration.* 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, and Cutek. *Important: Bison 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. Allow the deck to dry thoroughly before applying sealer. Exercise caution when sanding the ribbed wood tiles. *Important: Bison recommends that you test any cleaners or sealants in an inconspicuous area first before applying them to the installed deck.*

(Continued on next page.)

\*Patent #8,302,356.

\*\*Wood tile colors may differ than pictured and change without notice. Copyright 2018 United Construction Products, Inc. All Rights Reserved.



## Care and Maintenance (continued)

### 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. The following manufacturers offer UV stabilizing products specifically designed for use with exotic hardwoods: Cutek and TimberPro Coatings. *Important: Bison recommends that you test any cleaners or sealants in an inconspicuous area first before applying them to the installed deck.*

### Natural Aging:

Left to weather naturally, 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 natural aging of the deck. Shrinkage, cracks, and changes in the wood tile are natural.*

### Periodic Cleaning:

Commercial 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: Bison recommends that you test any cleaners or sealants in an inconspicuous area first before applying them to the installed deck.*

### Pressure Washing:

You may also use a pressure washer to remove built-up dirt, mold, or mildew from your wood tiles. Bison recommends using a professional deck cleaning contractor. *Important: Bison recommends that you test any cleaners or sealants in an inconspicuous area first before applying them to the installed deck.*

### Bamboo Tile Maintenance:

During installation, especially when cutting and sanding the tiles, be sure to thoroughly and completely remove fine dust particles from the tile surface. If allowed to dry, these contaminants can cause discoloration, which can be removed with a more rigorous scrubbing. In order to minimize checking (small cracks), the installer should seal any cut ends with Anchorseal® or other equivalent product. The Bamboo Tiles have a primer coat of Woca Exterior Oil (Natural Color) pre-applied. After several months, the bamboo fibers will open and this is an opportune time to apply your first coat of penetrating oil. Messmer's or Penofin® deck oils are recommended for bamboo, though most penetrating oils work. Follow the oil manufacturer's instructions for best results. To maximize the life of your beautiful new deck, Bison recommends annual cleanings. The annual cleanings do not need to be complicated - warm water, mild dish soap, and a non-metallic stiff bristle brush (to avoid surface scratching) will remove most of the year's accumulation of dirt. For cleaning exceedingly soiled areas, use deck cleaning products which contain Sodium Percarbonate or Potassium Hydroxide (Pro-Tech Wood Cleaner by Penofin® and Messmer's Wood & Deck Cleaner are two of a variety of options).

- We DO NOT recommend using a power washer to clean your Bamboo Tiles.
- Never use a metal edged shovel or power equipment to remove snow. For light snows a soft bristle broom will suffice, for heavier snows, use a hard-plastic shovel with rounded edges to prevent scratching.
- Always shovel along the length of the boards, never across.
- Never use rock salt or other de-icing products as they may cause discoloration. If you must use a de-icing agent, choose a product which is pet safe, urea free, and salt free.
- *Important: Bison recommends testing any stains, stabilizers, or sealants on an inconspicuous area to ensure it will not cause discoloration or other unintended damage.*

