



Ideal for use with Bison Pedestals, Bison Wood Tiles can be laid in a parquet pattern or mixed with other paving stones for a unique look. These woods provide warmth, excellent resistance to weather, and architectural charm to rooftop decks. All Bison Wood Tiles are made from tropical hardwoods and are the ideal long-lasting, low maintenance decking alternative.

Bison Wood Tiles for use with Bison Pedestals Specification SECTION 061500 Wood Decking

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Bison Wood Tiles for use with pedestals or traditional joist systems.

1.2 RELATED SECTIONS

**** NOTE TO SPECIFIER **** Delete any sections below not relevant to this project; add others as required.

- A. Section 061533 - Wood Patio Decking
- B. Section 064013 - Exterior Architectural Woodwork
- C. Section 075000 - Membrane Roofing
- D. Section 077246 - Roof Walkways
- E. Section 077616 - Roof Deck Pavers
- F. Section 096900 - Access Flooring

1.3 REFERENCES

**** NOTE TO SPECIFIER **** Delete references from the list below that are not actually required by the text of the edited section.

All Species:

- A. ASTM E 108-07a – Standard Test Method for Fire Tests of Roof Coverings
- B. ASTM E 84-08a* – Standard Test Method for Surface Burning Characteristics of Building Materials (NFPA 255, ANSI/UL 723 & UBC 8-1) (*N/A for Cumaru Wood Tiles)
- C. ASTM C 1028-07 – Static Coefficient of Friction
- D. ASTM E 2322-03 – Standard Test Method for Conducting Transverse and Concentrated Loads in Floor and Roof Construction

Select Species:

- E. ASTM C 1371-04a – Thermal Hemispherical Emittance (New/Weathered Ipê)
- F. ASTM E 1980-11/ASTM C 1549-09 – Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer (New/Weathered Ipê)
- G. ASTM E 72-10 – Uniform Transverse Loads (Massaranduba)
- H. LARR 26041 – Versadjust™ Adjustable Pedestal System, Bison Ipê Wood Tiles

1.4 SUBMITTALS

- A. Submit under provisions of Section 013300.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Storage/Handling requirements and recommendations.
 - 2. Installation methods.
- C. Shop Drawings: Submit shop drawings detailing the installation methods. Coordinate placement with locations noted on the Contract Drawings.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications:
 - 1. All primary products specified in this section will be supplied by a single Manufacturer with five (5) years of experience minimum.
- B. Installer Qualifications:
 - 1. Bison recommends the Installer have a minimum of two (2) years proven construction experience, be capable of estimating and building from blueprint plans and details, determining elevations, and properly handling materials. All work must comply with the Bison Innovative Products installation application procedures for pedestals specified herein.
- C. Special Considerations:
 - 1. The Contractor assumes the responsibility for and must take into consideration the structural capability and adequacy of the structure to carry the dead and live load weight(s) involved, and when appropriate, make sure that the density of any insulation is satisfactory to resist crushing and damaging the waterproofing membrane.

**** NOTE TO SPECIFIER **** Include a mock-up if the project size and/or quality warrant taking such a precaution. The following is one example of how a mock-up on a large project might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

- D. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - 1. Finish areas designated by Architect.
 - 2. Do not proceed with remaining work until workmanship is approved by Architect.
 - 3. Refinish mock-up area as required to produce acceptable work.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store Bison Wood Tiles and system components with labels intact and legible.
- B. Inspect all delivered materials to ensure they are undamaged and in good condition.
- C. Store and dispose of solvent-based materials, such as construction adhesive and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.



1.7 PROJECT CONDITIONS

- A. There are no temperature restriction guidelines prescribed by Bison Innovative Products that limit deck installation work other than the practical considerations of working in unsafe or inclement weather.
- B. Bison Wood Tiles and Pedestals listed in this section are for use with pedestrian traffic only.

1.8 WARRANTY

- A. At project closeout and upon request, Bison Innovative Products can provide to the Owner or Owners Representative an executed copy of the Manufacturer's standard document outlining the terms, conditions, and limitations of their limited warranty against manufacturing defect for a period of five (5) years.
- B. The Contractor warrants that his work will remain free from defects of labor and materials used in conjunction with his work in accordance with the General Conditions for this project or a maximum of five (5) years.
- C. It is the responsibility of the Contractor installing the product listed in this section to coordinate warranty requirements with any related sections or adjacent work. Notify the Architect immediately of any potential lapses or limitations in warranty coverage.
- D. Bison Wood Tiles are covered by a limited five (5) year warranty. Bison Wood Tiles are warranted to the original owner to be free of defects in material and workmanship for the period of five (5) years from the date of purchase. This warranty also extends to defects caused by wood rot and insect infestation for the same period. Defects are defined as imperfections that impair the utility of the product. This warranty applies to conditions of normal use and does not apply to damage resulting from abuse, excess weight, or acts of nature. Bison Wood Tiles are for pedestrian use only. Use of wheeled or motorized traffic voids the warranty. This warranty does not apply to non-structural surface cracks or to variations in wood color due to weathering. If a Wood Tile is deemed defective within the terms of the warranty, Bison Innovative Products may make repairs or provide for repair services at no cost to the customer. If a repair cannot be made, a replacement Wood Tile will be furnished at no cost to the customer. Bison Innovative Products must approve all warranty related repairs, and unauthorized repairs void this warranty. This warranty does not cover shipping damage. Shipping damage must be reported directly to Bison Innovative Products immediately upon receipt of products. Please save all product packaging for a short period of time in the event that return shipping is required.

1.9 MANUFACTURERS

****NOTE TO SPECIFIER**** Retain one of the following paragraphs 1.9A-C to coordinate with requirements of Division 1 section on product options and substitutions.

- A. Acceptable Wood Tile Manufacturer: Bison Innovative Products; 701 Osage Street, Bldg 2, Unit 120, Denver, CO 80204. Toll Free 800-333-4234. Phone 303-892-0400. Fax 303-825-5988. Email: info@bisonip.com. Web: www.bisonip.com.
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 012500.

PART 2 PRODUCTS

2.1 BISON WOOD TILES

- A. Pre-Manufactured Bison Wood Tiles
 - 1. Model: WT-IPE-24-SMOOTH Ipê Wood Tile
 - a. Dimensions: 23.875" x 23.875" x 1.69" (606 x 606 x 43 mm) nominal.
 - b. Weight per tile: 24 lbs (10.9 kg). Weight per square foot: 6 PSF (29.3 kg/m²).
 - c. Fire Rating: Class A – meets and exceeds ASTM E108-07a Spread of Flame Test.
 - d. Color: Brown Note: *Tiles are a natural product and have variations in color and grain.*
 - e. Surface: Smooth.
 - 2. Model: WT-IPE-24-RIBBED Ipê Wood Tile
 - a. Dimensions: 23.875" x 23.875" x 1.69" (606 x 606 x 43 mm) nominal.
 - b. Weight per tile: 24 lbs (10.9 kg). Weight per square foot: 6 PSF (29.3 kg/m²).
 - c. Fire Rating: Class A – meets and exceeds ASTM E108-07a Spread of Flame Test.
 - d. Color: Brown Note: *Tiles are a natural product and have variations in color and grain.*
 - e. Surface: Ribbed.
 - 3. Model: WT-IPE-3030-10PLANK-SMOOTH Ipê Wood Tile
 - a. Dimensions: 29.875" x 29.875" x 1.69" (759 x 759 x 43 mm) nominal.
 - b. Weight per tile: 34 lbs (15.4 kg). Weight per square foot: 5.4 PSF (26.4 kg/m²).
 - c. Fire Rating: Class A – meets and exceeds ASTM E108-07a Spread of Flame Test.
 - d. Color: Brown Note: *Tiles are a natural product and have variations in color and grain.*
 - e. Surface: Smooth.
 - 4. Model: WT-IPE-48-SMOOTH Ipê Wood Tile
 - a. Dimensions: 47.9375" x 23.875" x 1.69" (1218 x 606 x 43 mm) nominal.
 - b. Weight per tile: 48 lbs (21.8 kg). Weight per square foot: 6 PSF (29.3 kg/m²).
 - c. Fire Rating: Class A – meets and exceeds ASTM E108-07a Spread of Flame Test.
 - d. Color: Brown Note: *Tiles are a natural product and have variations in color and grain.*
 - e. Surface: Smooth.
 - 5. Model: WT-IPE-48-RIBBED Ipê Wood Tile
 - a. Dimensions: 47.9375" x 23.875" x 1.69" (1218 x 606 x 43 mm) nominal.
 - b. Weight per tile: 48 lbs (21.8 kg). Weight per square foot: 6 PSF (29.3 kg/m²).
 - c. Fire Rating: Class A – meets and exceeds ASTM E108-07a Spread of Flame Test.
 - d. Color: Brown Note: *Tiles are a natural product and have variations in color and grain.*
 - e. Surface: Ribbed.
 - 6. Model: WT-IPE-48-ECO-7PLANK-SMOOTH Ipê Eco Tile
 - a. Dimensions: 47.9375" x 23.875" x 1.69" (1218 x 606 x 43 mm) nominal.
 - b. Weight per tile: 60 lbs (27.2 kg). Weight per square foot: 7.5 PSF (36.6 kg/m²).
 - c. Fire Rating: Class A – meets and exceeds ASTM E108-07a Spread of Flame Test.
 - d. Color: Brown Note: *Tiles are a natural product and have variations in color and grain.*
 - e. Surface: Smooth.
 - 7. Model: WT-IPE-72-6PLANK Ipê Wood Tile (Special Order ONLY)
 - a. Dimensions: 72" x 23.875" x 1.69" (1829 x 606 x 43 mm) nominal.
 - b. Weight per tile: 71 lbs (32.2 kg). Weight per square foot: 5.9 PSF 28.8 kg/m².

- c. Fire Rating: Class A – meets and exceeds ASTM E108-07a Spread of Flame Test.
 - d. Color: Brown *Note: Tiles are a natural product and have variations in color and grain.*
 - e. Surface: Smooth or Ribbed.
8. Model: WT-IPE-96-6PLANK Ipê Wood Tile (Special Order ONLY)
- a. Dimensions: 96.0625" x 23.875" x 1.69" (2440 x 606 x 43 mm) nominal.
 - b. Weight per tile: 88 lbs (39.9 kg). Weight per square foot: 5.5 PSF (26.8 kg/m²).
 - c. Fire Rating: Class A – meets and exceeds ASTM E108-07a Spread of Flame Test.
 - d. Color: Brown *Note: Tiles are a natural product and have variations in color and grain.*
 - e. Surface: Smooth or Ribbed.
9. Model: WTFSC-100%IPE-24-8PLANK-SMOOTH FSC® Ipê Wood Tile
- a. Dimensions: 23.875" x 23.875" x 1.69" (606 x 606 x 43 mm) nominal.
 - b. Weight per tile: 24 lbs (10.9 kg). Weight per square foot: 6 PSF (29.3 kg/m²).
 - c. Fire Rating: Class A – meets and exceeds ASTM E108-07a Spread of Flame Test.
 - d. Color: Brown *Note: Tiles are a natural product and have variations in color and grain.*
 - e. Surface: Smooth.
10. Model: WTFSC-100%IPE-48 FSC® Ipê Wood Tile (Special Order ONLY)
- a. Dimensions: 47.9375" x 23.875" x 1.69" (1218 x 606 x 43 mm) nominal.
 - b. Weight per tile: 48 lbs (21.8 kg). Weight per square foot: 6 PSF (29.3 kg/m²).
 - c. Fire Rating: Class A – meets and exceeds ASTM E108-07a Spread of Flame Test.
 - d. Color: Brown *Note: Tiles are a natural product and have variations in color and grain.*
 - e. Surface: Smooth.
11. Model: WTFSC-100%IPE-72 FSC® Ipê Wood Tile (Special Order ONLY)
- a. Dimensions: 72" x 23.875" x 1.69" (1829 x 606 x 43 mm) nominal.
 - b. Weight per tile: 71 lbs (32.2 kg). Weight per square foot: 5.9 PSF (28.8 kg/m²).
 - c. Fire Rating: Class A – meets and exceeds ASTM E108-07a Spread of Flame Test.
 - d. Color: Brown *Note: Tiles are a natural product and have variations in color and grain.*
 - e. Surface: Smooth.
12. Model: WTFSC-100%IPE-96 FSC® Ipê Wood Tile (Special Order ONLY)
- a. Dimensions: 96.0625" x 23.875" x 1.69" (2440 x 606 x 43 mm) nominal.
 - b. Weight per tile: 88 lbs (39.9 kg). Weight per square foot: 5.5 PSF (26.8 kg/m²).
 - c. Fire Rating: Class A – meets and exceeds ASTM E108-07a Spread of Flame Test.
 - d. Color: Brown *Note: Tiles are a natural product and have variations in color and grain.*
 - e. Surface: Smooth.
13. Model: WTFSC-100%MASS-RIBBED FSC® Massaranduba Wood Tile
- a. Dimensions: 23.875" x 23.875" x 1.69" (606 x 606 x 43 mm) nominal.
 - b. Weight per tile: 24 lbs (10.9 kg). Weight per square foot: 6 PSF (29.3 kg/m²).
 - c. Fire Rating: Class A – meets and exceeds ASTM E108-07a Spread of Flame Test.
 - d. Color: Reddish Brown *Note: Tiles are a natural product and have variations in color and grain.*
 - e. Surface: Ribbed.
14. Model: WT-CUMARU-24-8PLANK-SMOOTH Cumaru Wood Tile
- a. Dimensions: 23.875" x 23.875" x 1.69" (606 x 606 x 43 mm) nominal.
 - b. Weight per tile: 24 lbs (10.9 kg). Weight per square foot: 6 PSF (29.3 kg/m²).
 - c. Fire Rating: Class A – meets and exceeds ASTM E108-07a Spread of Flame Test.
 - d. Color: Golden Brown *Note: Tiles are a natural product and have variations in color and grain.*
 - e. Surface: Smooth or Ribbed (Special Order ONLY).
15. Model: WT-CUMARU-48-8PLANK-SMOOTH Cumaru Wood Tile
- a. Dimensions: 47.9375" x 23.875" x 1.69" (1218 x 606 x 43 mm) nominal.
 - b. Weight per tile: 48 lbs (21.8 kg). Weight per square foot: 6 PSF (29.3 kg/m²).
 - c. Fire Rating: Class A – meets and exceeds ASTM E108-07a Spread of Flame Test.
 - d. Color: Golden Brown *Note: Tiles are a natural product and have variations in color and grain.*
 - e. Surface: Smooth or Ribbed (Special Order ONLY).
16. Model: WTFSC-100%CUMARU-24-8PLANK FSC® Cumaru Wood Tile
- a. Dimensions: 23.875" x 23.875" x 1.69" (606 x 606 x 43 mm) nominal.
 - b. Weight per tile: 24 lbs (10.9 kg). Weight per square foot: 6 PSF (29.3 kg/m²).
 - c. Fire Rating: Class A – meets and exceeds ASTM E108-07a Spread of Flame Test.
 - d. Color: Golden Brown *Note: Tiles are a natural product and have variations in color and grain.*
 - e. Surface: Smooth.
17. Model: WTFSC-100%CUMARU-48 FSC® Cumaru Wood Tile (Special Order ONLY)
- a. Dimensions: 47.9375" x 23.875" x 1.69" (1218 x 606 x 43 mm) nominal.
 - b. Weight per tile: 48 lbs (21.8 kg). Weight per square foot: 6 PSF (29.3 kg/m²).
 - c. Fire Rating: Class A – meets and exceeds ASTM E108-07a Spread of Flame Test.
 - d. Color: Golden Brown *Note: Tiles are a natural product and have variations in color and grain.*
 - e. Surface: Smooth.
18. Model: WTFSC-100%GARAPA-24-7PLANK-SMOOTH FSC® Garapa Wood Tile
- a. Dimensions: 23.875" x 23.875" x 1.69" (606 x 606 x 43 mm) nominal.
 - b. Weight per tile: 24 lbs (10.9 kg). Weight per square foot: 6 PSF (29.3 kg/m²).
 - c. Fire Rating: Class A – meets and exceeds ASTM E108-07a Spread of Flame Test.
 - d. Color: Golden Brown *Note: Tiles are a natural product and have variations in color and grain.*
 - e. Surface: Smooth.
19. Model: WT-MAHOGANY-24-5PLANK-SMOOTH Fijian Mahogany Wood Tile
- a. Dimensions: 24.125" x 24.125" x 1.77" (613 x 613 x 47 mm) nominal.
 - b. Weight per tile: 14 lbs (6.4 kg). Weight per square foot: 3.5 PSF (17.1 kg/m²).
 - c. Fire Rating: Class A – meets and exceeds ASTM E108-07a Spread of Flame Test.
 - d. Color: Golden Brown *Note: Tiles are a natural product and have variations in color and grain.*
 - e. Surface: Smooth.

20. Model: WT-BAMBOO24-4PLANK-SMOOTH Fused Bamboo Tile
 - a. Dimensions: 23.875" x 23.875" x 1.57" (606 x 606 x 40 mm) nominal.
 - b. Weight per tile: 24.35 lbs (11.07 kg). Weight per square foot: 6 PSF (29.3 kg/m²).
 - c. Fire Rating: Class A – meets ASTM E84-13a Spread of Flame Test.
 - d. Color: Dark Brown *Note: Tiles are a natural product and have variations in color and grain.*
 - e. Surface: Smooth.
21. Model: FS-1 Fastening Kit – Secures Bison Wood Tiles to Bison Pedestals without penetrating or damaging the Wood Tiles:
 - a. Components: Washer (US Patent #8,302,356), long screw, and short screw. Use long screw with Bison Wood Tiles and Bison Adjustable Pedestals, HD50 Fixed Height Pedestals, and HD75 Fixed Height Pedestals.
 - b. Weight: 0.192 oz. (5.4 g)
 - c. Material: Nylon
22. Model: FS-12 Spline – Secures Bison Wood Tiles to Bison Pedestals without penetrating or damaging the Wood Tiles when greater lock-down force is required:
 - a. Components: Spline, long screw, and short screw. Use long screw with Bison Wood Tiles and Bison Adjustable Pedestals, HD50 Fixed Height Pedestals, and HD75 Fixed Height Pedestals.
 - b. Tab Size: 3/16" (4.5 mm)
 - c. Weight: 1.41 oz. (40 g)
 - d. Material: Mineral Filled High Density Copolymer Polypropylene (Bison #B-PP-2025)

PART 3 EXECUTION

3.1 EXAMINATION

- A. Prior to installation verify the following:
 1. All elevations and deck dimensions are correct.
 2. Special features and anticipated live/dead loads on the Wood Tiles are compatible with the deck system.
 3. Substrates have been properly prepared, and the project is set to proceed.
 - a. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparations before proceeding.

3.2 PREPARATION

- A. Reference Installation Detail documentation for other recommended preparations.

3.3 INSTALLATION

- A. Reference Installation Detail documentation for recommended installation procedures.
- B. If a scenario is encountered during installation which is not covered in the Installation Details, please contact Bison Innovative Products at 303-892-0400 or Toll-Free at 800-333-4234.

3.4 FIELD QUALITY CONTROL

- A. During Installation:
 1. Inspect construction progress regularly to ensure that grid lines and spacing are being maintained in a straight and consistent pattern and that the Wood Tiles and Pedestals are level and not rocking. Shim as required.
 2. When installing Bison Wood Tiles, Bison recommends spacing pedestals in a 2' (24") grid; with the exception of the Bison 30" x 30" Wood Tiles which can be installed on a 30" grid.
 3. Particular attention should be paid to pedestrian entrance or access points to eliminate potential trip hazards.
 4. Unless otherwise specified in writing to allow for expansion, inspect to assure that all spacing between Wood Tiles does not exceed one tab width and there is no more than 1/8" gap at perimeter.
 5. While Bison Wood Tiles are durable, they can be damaged by mishandling or careless treatment. *Note: If tools or equipment are dropped on the tile surface, chips, cracks, gouges, scratches, or other surface damage can occur. Account for this by protecting installed Wood Tiles if further construction will occur post-installation. Important: Pay special attention to removing metal shavings or filings from Wood Tile surface, as there is a reaction causing discoloration.*
- B. Immediately Following Installation - The Owner, or the Owner's Agent, shall carefully inspect the deck system to be positive that:
 1. The new deck system is adequately blocked on all sides to contain the surface decking and related components.
 2. All required spacer tabs are in place, visible, and secure.
 3. There is no more than one tab width of space between any Wood Tiles and there is no more than 1/8" gap at perimeter.
 4. There is no ballasting rock used to completely fill in any perimeter voids.
 5. There is no rocking of Wood Tiles as foot traffic is applied to the surface.
 6. For decks with Ribbed Wood Tile surfaces, Wood Tile ribs are swept of any wood debris using a stiff bristled, non-scuffing broom or leaf blower after installation.
- C. Other - Installer and/or Architect has the responsibility of informing the Owner about performing routine maintenance on the deck. This includes:
 1. Protecting the installed Wood Tiles from damage which may occur as a result of continued construction.
 2. Checking for rocking Wood Tiles and properly applying shims as the substrate can settle and require Pedestal adjustment.
 3. Periodically checking for broken, damaged, or missing tab sets and replacing them to limit deck movement.
 4. Maintaining intact and structurally sound perimeter containment.

3.5 CARE & MAINTENANCE OF WOOD TILES

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

- A. **General Safety Precautions:** Bison recommends wearing puncture resistant safety gloves and safety glasses with side shields when handling, cutting, or sanding Bison Wood Tiles. Use a full-face shield outdoors or in a well-ventilated area for processes which may generate excessive dusts and splinters. Respirators MUST be worn if the ambient concentration of airborne contaminants exceeds Prescribed Exposure Limits (PEL). Dust masks may be worn to avoid the inhalation of nuisance hardwood dust, which according to the State of California, can lead to long-term health effects. Dust masks are not adequate protection in environments above the Occupational Safety & Health Administration's (OSHA) exposure limits. Refer to product SDS Section 8 for more information.

- B. **Storage:** Store Bison Wood Tiles and system components out of direct sunlight until they are 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.
- C. **Cutting:** Bison Wood Tiles have a very high density and a slower feed rate is recommended when cutting; carbide blades are highly recommended. To minimize checking or small cracks, the installer should consider sealing any cut ends with an appropriate glue or end sealer specifically designed for use on exterior wood such as PVA Wood Glue by Elmers or Gorilla. 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.
- D. **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. Bison Wood Tiles use 1.20" (30 mm) long #11 stainless steel screws. Use of galvanized fasteners is not recommended.
- E. **Fastening:** Bison strongly recommends the use of Bison Pedestals and FS-1* fastening kits or FS-12* splines when installing Bison Wood Tiles. The Bison Wood Tile and Pedestal Deck System installs quickly, securely, and allows for removal later if required. The FS-1* and FS-12*, available exclusively from Bison, secures Bison Wood Tiles to Bison Pedestals without penetrating or damaging the Wood Tile. (*US Patent #8,302,356 and Patents Pending.)
- F. **Wood Characteristics:** Bison Wood Tiles are made of South American (Cumaru, Ipê, Garapa, and Massaranduba), Fijian (Mahogany), and Chinese (Fused Bamboo) hardwoods which contain a rich variety of graining and coloration, are exceptionally dense, and resistant to insects. Bison Wood Tiles are a natural material and can absorb or lose moisture in different climates. The natural shading, coloration, and graining variations add to the architectural character and overall visual appeal of the finished product.
- G. **During Installation & Periodically After Installation is Complete:** Check for rocking Wood Tiles and adjust or shim immediately. Failure to do so can cause a tripping hazard. Periodically check spacer tabs and immediately replace broken tabs to limit deck movement. Make sure the edge restraint stays intact and structurally sound. Most decks need to be cleaned once installation is complete.
- H. **IMPORTANT NOTE:** Wood Tile surfaces may spot or stain when exposed to various materials or chemicals. If spotting or staining occurs, see Discoloration section below for more information. To avoid spotting or staining during construction, Bison recommends covering the deck thereby reducing exposure to metal that could rust and react to the deck tile surface. DO NOT cut metals or leave metal filings, debris or pieces on exposed deck tiles. DO NOT clean the deck or adjoining surfaces with steel wool or wire brushes. DO NOT place iron tools, fasteners, materials, or equipment on the deck.
- I. **Discoloration:** Bison Wood Tiles are made of natural materials and surfaces may spot or stain when exposed to various materials including: metal, steel, iron, or aluminum filings, pieces, equipment, tools, or fasteners; iron enriched fertilizers; plant debris; animal urine; beverage, food, or grease spills; or mildew that naturally occurs in humid or moist locations. Bison recommends initially trying to remove the stain or spill with warm water, mild dish soap, and non-metallic stiff bristle brush. If unsuccessful, test a deck cleaner or brightener such as Messmer's Part B, Defy Deck Brightener, or other wood brightener with oxalic acid as their active ingredient in an inconspicuous location. If the spotting begins to clear up, the discoloration is likely being caused by exposure to metal, steel, iron, or aluminum filings, pieces, equipment, tools, or fasteners; iron enriched fertilizers; plant debris; or animal urine. If the spot does not clear up with warm water and mild dish soap or with oxalic acid, Bison recommends applying a Q-Tip soaked in chlorine bleach to a spotted area in an inconspicuous location. If the spot starts to clear up when bleach is applied, then the issue is likely a natural occurrence of mildew. See Cleaning instructions below for more information. ALWAYS test any cleaner or brightener on wood in an inconspicuous location, rinse the deck thoroughly after cleaning and follow manufacturer's instructions for best application practices and safe handling practices.
- J. **Cleaning:** If desired, Bison Wood Tiles can be periodically cleaned. Bison recommends using a deck cleaning product designed for hardwoods which safely cleans the wood. Bison Wood 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. In addition, always check with the manufacturer of your roof membrane to ensure that any cleaning solution, stain, oil, deck brightener, or bleach will not compromise or damage the waterproofing membrane. DO NOT scrub tiles with wire, iron, or steel brushes.
- K. **Sealing & Staining:** Wood stabilizers or sealants can help mitigate the loss of moisture and minimize checking and splitting. Cleaning and/or sanding the surface of the wood prior to applying the sealer can help the product penetrate deeper into the wood grain. Due to the density of the tropical hardwood, all the applied product may not be absorbed. Follow manufacturer's recommendations to gently wipe off the excess stain for a more even uniform appearance. The installer can also lightly apply glue or end sealer specifically designed for exterior exotic wood to the ends to help prevent splitting, as desired. NOTE: Small checks and splits are normal and a natural part of the wood as the wood balances with the humidity of the surrounding climate. The following manufacturers offer cleaning and sealing products specifically designed for use with exotic hardwoods: Cabots, Penofin®, Messmers, Cutek, or Defy.
- L. **Sanding:** If you plan to seal or stain your Wood Tiles, a light sanding is highly recommended. Use 120 grit sandpaper to reduce the appearance of any minor marks, scratches, or imperfections. Use 200+ grit sandpaper to lightly sand the Wood Tiles for a more uniform appearance. After sanding, sweep the tiles and use water to rinse away any remaining dust and allow to dry thoroughly before applying sealer. Ensure the wood surface is clear of any steel or iron filings, dusts, or shavings as the natural acids in the wood will react with the iron and water to form a blackish-grey ferric oxide (rust). Exercise caution when sanding Bison Ribbed Wood Tile surfaces. IMPORTANT: Always test any product you apply in an inconspicuous place to make sure it performs as you expect. DO NOT use steel wool to sand any wood tile.
- M. **Maintaining Tile Color:** To better maintain the rich coloration of the Wood Tiles, you can apply a natural oil finish or stabilizer with UV blocker. These products offer UV protection as well as 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 protection products specifically designed for use with exotic hardwoods: Cutek and TimberPro Coatings. IMPORTANT: Always test any product you apply in an inconspicuous place to make sure it performs as you expect. Bison recommends reapplying the natural oil finish, stabilizer, stain, or sealant per the product manufacturer's recommendation for optimal results.
- N. **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, furniture placement, and other local conditions will factor into the aging of the deck.
- O. **Pressure Washing:** You may also use a pressure washer to remove built-up dirt, stains, spotting, 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.
- P. **Commercial Buffing Machines:** Commercial floor scrubbers or floor buffing machines are not recommended due to their potential to damage the Wood Tiles and/or Pedestals with their movement mechanisms.

- Q. **Snow Removal:** Sweeping: A non-metallic, stiff-bristled broom is the recommended method for removing snow from a wood deck, as it causes the least damage to your decking material. The use of mechanical snow scoopers and blowers is NOT recommended on Bison Wood Tiles or Pedestal products. Shoveling: Never use a metal shovel, as this can gouge, scrape, or otherwise cause damage to the decking material. Use a plastic shovel and shovel along the length of the deck boards (instead of across) to minimize damage to the wood grain. Avoid chipping away at ice with a shovel or pick, as this can also damage the decking material. Small or narrow plastic shovels may be purchased to help get into tighter areas such as stairs while still moving with the grain of the decking.
- R. **Ice Removal:** Salts or deicers should never be used on a natural wood deck because of the corrosive nature of the salt. Deicers come in a range of compositions, including: Sodium Chloride (NaCl), Magnesium Chloride (MgCl₂), Calcium Chloride (CaCl₂), and Potassium Chloride (KCl) as well as many other more expensive components. These chemicals can erode any waterproof stain or finish and leave water marks on the wood itself. Wood absorbs and releases moisture and expands and contracts over time. Deicers absorb most of the moisture in natural materials, which makes the wood more brittle and will cause additional cracking and checking. As an alternative, carefully pour hot water over the iciest areas of the deck and use your outdoor broom to remove the ice and excess water. Sand or kitty litter can be spread over the deck to help prevent more ice from building up although this may be tracked indoors.
- S. **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 PVA Wood Glue by Elmers or Gorilla 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. IMPORTANT: Bison recommends testing any stains, stabilizers, or sealants on an inconspicuous area to ensure it will not cause discoloration or other unintended damage.
1. We DO NOT recommend using a power washer to clean your Bamboo Tiles.
 2. 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.
 3. 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.

END OF SECTION

<p>IPÊ WT-IPE-24 SMOOTH or RIBBED</p> 	<p>WT-IPE-24-SMOOTH or WT-IPE-24-RIBBED</p> <p>Dimensions: 23.875" x 23.875" x 1.69" nominal Weight: 24 lbs Weight PSF: 6 PSF Color: Brown Class A: ASTM E108-07a</p>	<p>IPÊ WT-IPE-48 SMOOTH or RIBBED</p> 	<p>WT-IPE-48-SMOOTH or WT-IPE-48-RIBBED</p> <p>Dimensions: 47.9375" x 23.875" x 1.69" nominal Weight: 48 lbs Weight PSF: 6 PSF Color: Brown Class A: ASTM E108-07a</p>
<p>IPÊ WT-IPE-48-ECO-7PLANK- SMOOTH</p> 	<p>WT-IPE-48-ECO-7PLANK SMOOTH</p> <p>Dimensions: 47.9375" x 23.875" x 1.69" nominal Weight: 60 lbs Weight PSF: 7.5 PSF Color: Brown Class A: ASTM E108-07a</p>	<p>IPÊ WT-IPE-3030-10PLANK-SMOOTH</p> 	<p>WT-IPE-3030-10PLANK-SMOOTH</p> <p>Dimensions: 29.875 x 29.875" x 1.69" nominal Weight: 34 lbs Weight PSF: 5.4 PSF Color: Brown Class A: ASTM E108-07a</p>
<p>IPÊ WT-IPE-72-6PLANK-SMOOTH</p> 	<p>Special Order: WT-IPE-72-6PLANK-SMOOTH</p> <p>Dimensions: 72" x 23.875" x 1.69" nominal Weight: 71 lbs Weight PSF: 5.9 PSF Color: Brown Class A: ASTM E108-07a</p>	<p>IPÊ WT-IPE-96-6PLANK-SMOOTH</p> 	<p>Special Order: WT-IPE-96-6PLANK-SMOOTH</p> <p>Dimensions: 96.0625" x 23.875" x 1.69" nominal Weight: 88 lbs Weight PSF: 5.5 PSF Color: Brown Class A: ASTM E108-07a</p>

<p>CUMARU WT-CUMARU-24-8PLANK- SMOOTH</p> 	<p>WT-CUMARU-24-8PLANK- SMOOTH Special Order: Ribbed Surface</p> <p>Dimensions: 23.875" x 23.875" x 1.69" nominal Weight: 24 lbs Weight PSF: 6 PSF Color: Golden Brown Class A: ASTM E108-07a</p>	<p>CUMARU WT-CUMARU-48-8PLANK- SMOOTH</p> 	<p>WT-CUMARU-48-8PLANK-SMOOTH Special Order: Ribbed Surface</p> <p>Dimensions: 47.9375" x 23.875" x 1.69" nominal Weight: 48 lbs Weight PSF: 6 PSF Color: Golden Brown Class A: ASTM E108-07a</p>
<p>CUMARU WT-FSC-100%-CUMARU-24- 8PLANK-SMOOTH</p> 	<p>WT-FSC-100%-CUMARU-24- 8PLANK-SMOOTH</p> <p>Dimensions: 23.875" x 23.875" x 1.69" nominal Weight: 24 lbs Weight PSF: 6 PSF Color: Golden Brown Class A: ASTM E108-07a</p> <p>Special Order: WTFSC-100%CUMARU-48 23.875" x 23.875" x 1.69" nominal Weight: 48 lbs / Weight PSF: 6 PSF</p>	<p>IPÉ WT-FSC-100%-IPE-24- 8PLANK-SMOOTH</p> 	<p>WT-FSC-100%-IPE-24- 8PLANK-SMOOTH</p> <p>Dimensions: 23.875" x 23.875" x 1.69" nominal Weight: 24 lbs Weight PSF: 6 PSF Color: Brown Class A: ASTM E108-07a</p> <p>Special Order: WTFSC-100%IPE-48 47.9375" x 23.875" x 1.69" nominal Weight: 48 lbs / Weight PSF: 6 PSF WTFSC-100%IPE-72 72" x 23.875" x 1.69" nominal Weight: 71 lbs / Weight PSF: 5.9 PSF WTFSC-100%IPE-96 96.0625" x 23.875" x 1.69" nominal Weight: 88 lbs / Weight PSF: 5.5 PSF</p>
<p>MASSARANDUBA WT-FSC-100%-MASS- RIBBED</p> 	<p>WT-FSC-100%-MASS-RIBBED</p> <p>Dimensions: 23.875" x 23.875" x 1.69" nominal Tile Weight: 24 lbs Weight PSF: 6 PSF Color: Reddish Brown Class A: ASTM E108-07a</p>	<p>GARAPA WT-FSC-100%-GARAPA-24- 7PLANK-SMOOTH</p> 	<p>WT-FSC-100%-GARAPA-24-7PLANK- SMOOTH</p> <p>Dimensions: 23.875" x 23.875" x 1.69" nominal Tile Weight: 24 lbs Weight PSF: 6 PSF Color: Golden Brown Class A: ASTM E108-07a</p>
<p>MAHOGANY WT-MAHOGANY-24-5PLANK SMOOTH</p> 	<p>WT-MAHOGANY-24-5PLANK- SMOOTH</p> <p>Dimensions: 24.125" x 24.125" x 1.77" nominal Tile Weight: 14 lbs Weight PSF: 3.5 PSF Color: Golden Brown Class A: ASTM E108-07a</p>	<p>BAMBOO WT-BAMBOO24-4PLANK- SMOOTH</p> 	<p>WT-BAMBOO24-4PLANK-SMOOTH</p> <p>Dimensions: 23.875" x 23.875" x 1.57" nominal Tile Weight: 24.35 lbs Weight PSF: 6 PSF Color: Dark Brown Class A: ASTM E84-13a</p>

<p style="text-align: center;">FS-1 Fastening Kit*</p> 	<p style="text-align: center;">FS-1 Fastening Kit*</p> <p style="text-align: center;">Secures Bison Wood Tiles to Bison Pedestals.</p> <p>Long screw for use with Bison Adjustable Pedestals, HD50 Fixed Height Pedestals, and HD75 Fixed Height Pedestals.</p>
<p style="text-align: center;">FS-12 12" Spline*</p> 	<p style="text-align: center;">FS-12 Spline*</p> <p style="text-align: center;">Secures Bison Paver Trays to Bison Pedestals when additional protection against wind uplift is required.</p> <p>Long screw for use with Bison Adjustable Pedestals, HD50 Fixed Height Pedestals, and HD75 Fixed Height Pedestals.</p>

*US Patent No. 8,302,356 and Patents Pending.