

TECHNICAL & MATERIAL SAFETY DATA STYLEBOARD™ STRANDWOVEN BAMBOO

User's Responsibility: The information contained in this Technical & Material Safety Data Sheet is based on the information provided by the manufacturer and the experience of occupational health and safety professionals and comes from sources believed to be accurate or otherwise technically correct. It is the user's responsibility to determine if this information is suitable for their applications and to follow safety precautions as may be necessary. The user has the responsibility to make sure that this sheet is the most up-to-date issue.

1. Product Identification

STYLEBOARD™ Strandwoven Bamboo is a trademarked construction method in which fibres of semi-shredded bamboo are intertwined in a pressure-treated adhesive base to form a high-density, homogenous bamboo plank without internal voids.

As used in Style Plantation's flooring, fibres may be all natural coloured or all caramelized (Coffee), or dramatic combinations of fibres such as the light and dark caramelized fibres form a range of styles including but not limited to : Suede, Tigerboard and Marble. The range also includes a selection of colours derived from a stained finish - Burgundy (red base), Espresso (deep brown/black base), Limewash (white distressed look base).

Our suppliers use one of the hardiest species of Chinese bamboo. It is cut into strips before drying, steaming and compressing it in sheet form under heat and pressure. The result is a flooring product that's stronger than most traditional hardwood flooring products.

Most wood products undergo a Janka hardness rating which denotes the timber hardness and therefore durability and the higher the score the harder the timber. In Australia the bench mark is often Jarrah, with a rating of 8.5 or 8.6. STYLEBOARD™ has been tested by CSIRO for its Janka rating and tested at 14.3. Very few timbers rate higher.

In addition to durability and stability, bamboo might be preferred for its natural beauty and the fact that it doesn't contribute to the depletion of our hardwood resources.

Bamboo flooring is comparable in price to premium hardwood flooring. Because it is a natural, renewable resource, bamboo flooring is considered by many experts and homeowners to be the logical flooring choice of the future.



style | plantation
GROWING YOUR WORLD. SAVING OURS.

STYLEBOARD™ STRANDWOVEN BAMBOO SPECIFICATIONS

PHYSICAL PROPERTIES AND PERFORMANCE QUALITIES

Colours: Strand woven bamboo flooring is available in a wide range of natural and surface stain floor boards in a variety of colours.

Sizes: STYLEBOARD™ narrow boards - 14mm(t) x 96mm(w) x 1830mm - 1850mm (l)

Sizes: STYLEBOARD™ wide boards - 14mm(t) x 137–142mm(w) x 1830mm - 1850 mm (l)

Finishes: available in matt, semi-gloss and gloss, 3 - 6 coats of quality Treffert coatings.

Density: BSB Natural - 993kg/m³, BSB Coffee - 1030kg/m³

Hardness: (Janka rating) BSB Natural - 14.3kN, BSB Coffee - 15.3kN

Impact: 114.7kg/cm³

Moisture Content: 10.54% - 12%

Fire Rating: Average Critical Radiant Flux: 7.1kW/m²

Smoke Rating: Average Critical Smoke Obstruction: 31%.min

Dimensional Stability: ASTM D 1037: Dimensional change coefficient: 0.17 parallel / 0.08 perpendicular / 0.42 thickness.

Slip Resistance: ASTM D2394, Average Static Coefficient of Friction 0.420; Average Lineal (Dynamic) Coefficient of Friction 0.451.

Abrasion Resistance: ASTM D 4060, CS-17 Taber abrasive wheels: Final wear-through: Minimum 48,500 cycles.

Radiant Performance: The Radiant Panel Association defines engineered bamboo flooring as having a known R value of 0.96 per inch of thickness. The thickness of Style Plantation STYLEBOARD™ Strand bamboo floating floor is 9/16" creating an R value of 0.49.

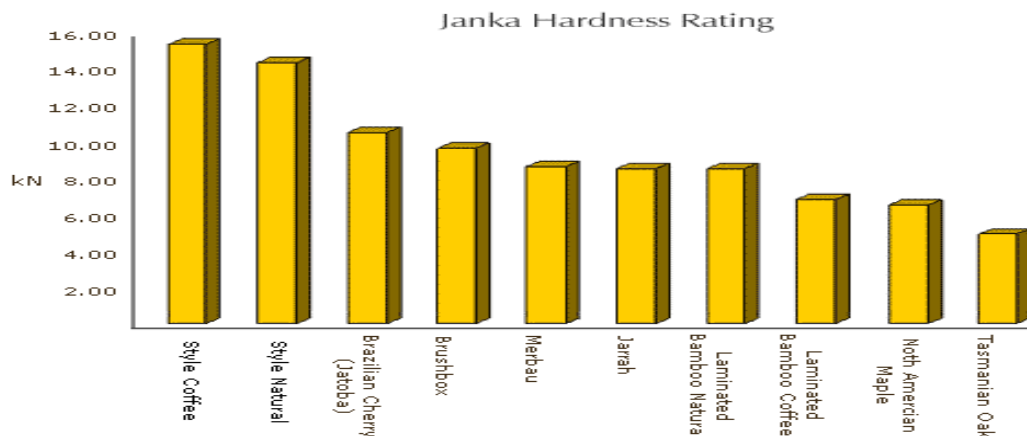
Formaldehyde Emission: The phenol-based adhesive used in the manufacturing of Style Plantation's STYLEBOARD™ and coordinating accessories has a formaldehyde off-gassing limit averaging 0.01ppm (parts per million): 75 times lower than OSHA standards, 10 times lower than E1 standards.

Milling: All with micro-bevel edge. Tongue groove on all sides.

Installation: Glue down is recommended, using the Sika product; T55—installation Guidelines available to download from our website — www.styleplantation.com

Accessories: To match our flooring, we offer a full range of accessories including bull noses for finishing stairs, reducers, and quarter rounds.

The graph below provides an indicative view of the hardness of various products used locally for flooring applications.



MATERIAL SAFETY DATA

2.

Hazardous Ingredients Identity Information

Name	CAS#	Percent	Agency	Exposure Limits	Comments
Bamboo *1	None	94-95	OSHA OSHA ACGIH ACGIH	PEL-TWA 15mg/m3 PEL-TWA 5mg/m3 TLV-TWA 3mg/m3 TLV-STEL 10mg/m3	Total Dust Respirable dust fraction Respirable dust fraction Inhalable Particles
Phenol- Formalde- hyde resin solids *2	None	4-5	OSHA OSHA ACGIH	PEL-TWA 0.75ppm PEL-STEL 2ppm TVL-Ceiling 0.3ppm	Free gaseous formaldehyde Free gaseous formaldehyde Free gaseous formaldehyde
UV Finish Polymerized Polyurethane *3	None	0-1	OSHA ACGIH	PEL-TWA None TLV-TWA None	None None

Bamboo is a member of the grass family which has distinct anatomical differences from that of wood. Therefore, bamboo would be regulated as an organic dust in a category known as "Particulates Not Otherwise regulated" (PNOR), or Nuisance Dust. By OSHA. Contains less than 0.02% free formaldehyde For pre-finished flooring.

3. Hazard Identification

Appearance and Odour: A matrix of natural/blonde or coffee (carbonised) coloured interlocking bamboo fibres bonded with low-fuming phenol-formaldehyde resin having a slightly aromatic odour.

Primary Health Hazards: The primary health hazards posed by these products are thought to be due to exposure to dust generated when machining this product (e.g. sanding, sawing, routing and or planing)

Primary Route(s) of Exposure:

- (X) Ingestion: Dust
- (X) Skin: Dust
- (X) Inhalation: Dust



style | plantation
GROWING YOUR WORLD. SAVING OURS.

Medical Conditions Generally Aggravated by Exposure: Dust may aggravate pre-existing respiratory conditions or allergies.

Chronic Health Hazards: Bamboo dust has not been associated with any long term health effects including cancer in animals as well as humans.

Carcinogenicity Listing:

(X) NTP: Not Listed

(X) IARC Monographs: Not Listed

(X) OSHA Regulated: Not Listed

4. Emergency and First-Aid Procedures

Ingestion: Not applicable under normal use.

Eye Contact: Dust may cause mechanical irritation. Treat dust in eye as foreign object. Flush with water to remove dust particles. Get medical help if irritation persists.

Skin Contact: Not applicable for this product in its purchased form, frequent handling of dust or product in its manufactured form may cause some minor drying of the skin, mechanical abrasion, cuts or slivers. Wash hands after handling and obtain medical help if rash or irritation occurs.

Skin Absorption: Not known to occur under normal use.

Inhalation: Not applicable for this product in its purchased form. Bamboo dust may cause obstruction in the nasal passages, resulting in dryness of nose, dry cough and sneezing. Remove to fresh air. Get medical help if persistent irritation, severe coughing or breathing difficulty occurs.

5. Fire and Explosion Data

Fire Rating: Average Critical Radiant Flux: 7.1kW/m²

Flash Point (Method Used): N/A

Flammable Limits:

LEL: N/A

UEL: N/A

Extinguishing Media: Water, carbon dioxide, sand or dry chemical.

Auto-ignition Temperature: Variable [typically 400-500oF (204-260oC)]

Special Fire-fighting Procedures: None.

Unusual Fire and Explosion Hazards: None



style|plantation
GROWING YOUR WORLD. SAVING OURS.

6. Accidental Release Measures

Steps to be Taken In Case Material Is Released or Spilled: Not applicable for product in purchased form. Dust generated from sawing, sanding, drilling, or routing of products may be vacuumed or shovelled for recovery or disposal. Avoid dusty conditions and provide good ventilation. A OHS approved dust respirator should be worn if dust exposure limits are exceeded.

7. Handling and Storage

Precautions to be taken in handling and storage: No special handling precautions are required for products in purchased form. Keep in cool, dry place away from open flame. This product will release small quantities of gaseous formaldehyde (<0.01 ppm in accordance with ASTM E1333 test methods). Store in well ventilated area.

8. Exposure Control Measures

Personal Protective Equipment:

RESPIRATORY PROTECTION -- Not applicable for product in purchased form. A OSH-approved dust respirator is recommended when allowable exposure limits are exceeded.

PROTECTIVE GLOVES -- Not required. However, cloth, canvas, or leather gloves are recommended to minimize potential mechanical irritation slivers from handling and machining product.

EYE PROTECTION -- Not applicable for product in purchased form. Goggles or safety glasses are recommended when machining this product.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT -- Not applicable for product in purchased form. Outer garments may be desirable in extremely dusty areas.

WORK/HYGIENE PRACTICES - Follow good hygienic and housekeeping practices. Clean up areas where wood dust settles to avoid excessive accumulation of this combustible material. Minimize blowdown or other practices that generate high airborne dust concentrations.

VENTALATION : LOCAL EXHAUST -- Provide local exhaust as needed so that exposure limits are met.



style | plantation

GROWING YOUR WORLD. SAVING OURS.

MECHANICAL (GENERAL) -- Provide general ventilation in processing and storage areas so that exposure limits are met.

9. Physical/Chemical Properties

Boiling Point (@ 760 mm Hg): N/A

Vapour Pressure (mm Hg): N/A

Vapour Density (air = 1; 1 atm): N/A

Specific Gravity (H₂O = 1): 0.58 g/ml

Melting Point: N/A

Evaporation Rate (Butyl acetate = 1): N/A

Solubility in Water (% by weight): <0.1

% Volatile by Volume (@ 70oF (21oC)): 0

pH: N/A

Oil-water distribution coefficient: N/A

Odour threshold: ND

10. Stability and Reactivity

Stability: (x) Stable

Conditions to Avoid: Avoid open flame. Product may ignite at temperatures in excess of 400oF (204oC).

Incompatibility (Materials to Avoid): Avoid contact with oxidizing agents.

Hazardous Decomposition or By-Products: Thermal decomposition products include carbon monoxide, carbon dioxide, aliphatic aldehydes, rosin acids, terpenes, and polycyclic aromatic hydrocarbons.

Hazardous Polymerization: () May occur (x) Will not occur

Sensitivity to Mechanical Impact: N/A

Sensitivity to Static Discharge: N/A

11. Toxicological Information

None available for product in purchased form.

Formaldehyde OSHA Hazard rating = 3 for local and systemic acute and chronic exposures; highly toxic. Irritation studies: human skin, 150 ug/3 days, intermittent exposure produced mild results; human eye, 1 ppm/6 minutes, produced mild results.



style | plantation

GROWING YOUR WORLD. SAVING OURS.

Toxicity studies: human inhalation TCLO of 8 ppm reported but response not specified; human inhalation TCLO of 17/mg/m³ for 30 minutes produced eye and pulmonary results; human inhalation TCLO of 300ug/m³ produced nose and CNS results; LC50 (rat, inhalation) = 1,000 mg/m³/30 minutes; LC50 (mice, inhalation) = 400mg/m³/2 hours.

12. Ecological Information

No information available at this time.

13. Disposal Considerations

Waste Disposal Method: If disposed of or discarded in its purchased form, incineration is preferable. Dry land disposal is acceptable in most states. It is, however, the user's responsibility to determine at the time of disposal whether your product meets the criteria for hazardous waste. Follow applicable federal, state, and local regulations.

14. Transport Information

Not regulated as a hazardous material.



style|plantation
GROWING YOUR WORLD. SAVING OURS.

MATERIAL & SUSTAINABILITY INFORMATION

Style Plantation is committed to developing, sourcing and supplying beautiful bamboo products that:

- Enhance home & business environments
- We align ourselves with manufacturers that pay the farmers fair market prices for raw material in China and also pay fair wages to factory workers in the manufacturing plants
- Reduce dependence on dwindling timber resources
- Rely on rapidly renewable bamboo resources
- Adhere to stringent environmentally conscious specifications
- Promote green building practices
- Help neutralise our company's environmental footprint

The following information is intended to respond to material and sustainability related questions relevant to our industry:

Environmental Third Party Certifications

ISO 14001: 2004—Environmental management systems

ISO 9001

Materials & Content: Pre/Post Consumer Recycled Materials

Do Style Plantation products contain any post consumer recycled materials?

Product: No. Style Plantation products are manufactured from new bamboo fibre, adhesives and coatings.

Packaging: Yes. Style Plantation's product packaging contains both pre and post consumer recycled content.

Materials & Content : Manufacturing Process

Does the factory that Style Plantation sources it's product/s from use pre/post consumer recycled materials?

Yes: The factory that Style plantation sources it's product from, burns pre-consumer recycled sawdust and other bamboo waste to create steam which powers the kilns, drying rooms and heats the hydraulic presses.



style | plantation

GROWING YOUR WORLD. SAVING OURS.

Materials & Content : Regional Materials - Raw Material Sourcing & Extraction

Where are the raw materials sourced/extracted from?

All Style Plantation's flooring, panel and veneer raw materials and finished goods are manufactured from raw materials grown and sourced in the Peoples Republic of China.

1. **Bamboo Raw Material:** makes up +/- 95% of the content of the finished product and is sourced and extracted from *Jiangsu Province* – maximum distance travelled from source to factory is within a 300km radius of the manufacturing facility
2. **Coatings :** make up +/- 0 -1% of the content of the finished product sourced from Shanghai +/- 200km from the manufacturing facility
3. **Adhesives:** make up +/- 4-5% of the content of the finished product sourced from Shanghai +/- 200km from manufacturing facility

Materials & Content : Regional Materials - Manufacturing

Where are the Style Plantation products manufactured?

Site finished flooring manufactured and coated in Taihuu Town, Yixing , Jiangsu PRC

Materials & Content : Regional Materials - Transportation

Do Style Plantation's products sequester more total CO2 than is emitted during the transportation of the products to the consumer?

Yes. The bamboo used in Style Plantation products sequesters (removes) Carbon (C) from atmospheric carbon dioxide (CO2) and releases the oxygen (O2) into the air. No more than 25% of the sequestered carbon is emitted as CO2 during the transportation of the products from the factory in China to any destination within Australia. The remaining 75% of the sequestered carbon is locked up within the products themselves for the lifespan of the products.

Materials & Content : Regional Materials - Rapidly Renewable Materials

Does the manufacturing process use any rapidly renewable materials?

Yes all the raw materials used in the manufacture of Style Plantation Bamboo Flooring, panels and veneers are harvested from the Moso or *Phyllostachys h. Pubescens* species. The bamboo is harvested between 5 and 6 years to ensure optimal density, performance and plant health. The Rapidly Renewable content of the product ranges between 94 and 96%.



style | plantation
GROWING YOUR WORLD. SAVING OURS.

Materials & Content : Certified Wood

Do Style Plantation products contain any certified wood content?

No. All the bamboo Style Plantation products are made from is harvested by hand in naturally occurring biologically diverse forest environments.

Location of Distribution

What is the distribution route for Style Plantation products?

All Style Plantation products are transported from the factory to the port in Shanghai (200kms from factory to Shanghai) and then shipped directly to our Australian distribution centre in Brisbane, Queensland or on occasion containers are shipped to Fremantle (Perth), Sydney, Melbourne or Auckland NZ dependent on the order requirements.

All orders are the processed at the said distribution centres and despatched via road or rail freight to the end user.

Waste Management — Recyclability whilst installing

Does the installation of Style Plantation products result in waste material that must be taken to a landfill?

Through careful management material overage can be reduced or eliminated. Additionally, any material overage can and should be kept as a resource should the need arise in the future for selective board replacement (in case of damage). Waste material such as sawdust and cutting scraps should be taken to construction material recycling centres for composting.

Waste Management — Recyclability in removal of products

Does the removal of Style Plantation products result in waste material that must be taken to a landfill?

All products that have not been nailed or glued can be reused. Additionally all Style Plantation products may be recycled at construction material recycling centres with the end material being shredded for composting, composite material construction or incineration for the purpose of power generation.



style | plantation

GROWING YOUR WORLD. SAVING OURS.

Waste Management : Cost to recycle

Does the recycling of Style Plantation products result in additional costs to the consumer?

Not necessarily. The consumer may incur removal and transportation costs but these same costs will exist regardless of whether the material is being transported to a landfill or a composting/recycling facility. In many cases consumers will save money as landfills often request a disposal fee but not many composting/recycling facilities request a fee or if they do it is a nominal fee.

Waste Management : Toxicity

Does the disposal of Style Plantation products present any known environmental risks?

No there are no known environmental risks upon disposal.

Indoor Environmental Quality

Do Style Plantation products contain any added urea formaldehyde resins?

The products emit less than .03ppm formaldehyde which is significantly less than allowed by any global standard.

Energy

Does the factory that Style Plantation sources its products from reduce the energy consumption compared to manufacture of similar products?

The factory burns all of its bamboo milling waste to create steam which is used to heat its kilns, drying rooms and hydraulic presses. The amount of energy saved has however not yet been determined.

Water

Does the factory/s manufacturing processes reduce water consumption compared to the manufacture of similar products?

Unknown. The factory recognises that water is a precious commodity and seeks to conserve this resource whenever possible. Water consumption and conservation goals have not yet been determined.

Life Cycle Assessment

Has a Life Cycle Assessment been conducted on the range of products on offer through Style Plantation?

The manufacturer is currently in the process of conducting the assessment as is required by GECA in order for Style Plantation to achieve full GECA (Good Environmental Choice Australia) accreditation.



style | plantation

GROWING YOUR WORLD. SAVING OURS.