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*Notes to Specifier:*

*Please visit [dassoXTR.com](http://dassoXTR.com) for the most current version of Specifications.*

*The following product specification language is to assist design professionals in specifying Fused Bamboo in the 3-PART SPECIFICATIONS FOR DECKING.*

*Sample language is provided for applicable articles in PART 1-GENERAL and Part 2-PRODUCTS following the construction specification institute's section format. Due to variation in specification systems in use, article and paragraph numbers and titles may differ somewhat than presented herein. The sample language should be edited accordingly to fit each firm's specifications.*

*Articles and paragraphs of this product specification assume the project manual will contain complete Division of 1 documents including 01 25 13-Product substitution procedures, Sections 01 33 00-Submittal Procedures, 01 62 00-Product Options, 01 66 00 Product Storage and Handling Requirements, 01 74 00-Cleaning and Waste Management, 01 77 00-Closeout Procedures, and 01 78 00-Closeout Submittals. Close coordination with Division 1 Sections is Required if the project manual does not contain these sections, additional information may be included under the appropriate articles.*

*Notes to the specifier are in all Italic text and are contained within rows of asterisks.*

*Green Text in Italic are Notes Related to LEED® Projects and can be deleted if the project is not intended to attain LEED® Certification*

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Section 06 73 00  
Fused Bamboo Decking and Trim Board

PART 1 - GENERAL

1.1 SECTION INCLUDES

1. This document specifies Fused Bamboo® Decking made from the renewable resources of 87% Moso Bamboo and 13% Phenolic Resin, a product manufactured based on dasso's Patent US8,709,578 B2.

2. Composite Decking

1.2 RELATED SECTIONS

Section 00 31 25.26 - Existing Wood, Plastics, and Composites Information  
Section 06 81 00 - Composite Railings  
Section 06-11 00 - Wood Framing  
Section 07 10 00 - Damp proofing and Waterproofing  
Section 31 10 00 - Site Cleaning

*Include all division 01 Sections containing LEED® Requirements*

### 1.3 REFERENCES

#### ASTM International

- a. ASTM E 84-11a - Standard Test Method for Surface Burning Characteristics of Building Materials.
- b. ASTM D 1037-2006a - Standard Test Methods for Evaluating Properties of Wood-Based Fiber and Particle Panel Materials.
- c. ASTM D 1413-2007e1 - Standard Test Method for Wood Preservatives by Laboratory Soil Block Cultures.
- d. ASTM F 1679-04 - Standard Test Method for Using a Variable Incidence Tribometer (VIT)
- e. ASTM D 2047 - 2011 - Standard Test Method for Static Coefficient of Friction of Polished-Coated Flooring Surfaces as Measured by the James Machine.
- f. ASTM D 2395-2002 - Standard Test Methods for Density and Specific Gravity (Relative Density) of Wood and Wood-Based Materials.
- g. ASTM D 2565 (Reapproved 2008) - Practice for Operating Xenon-Arc-Type Light-Exposure Apparatus with and Without Water for Exposure of Plastics.
- h. ASTM D 5071-06 - Standard Practice for Exposure of Photodegradable Plastics in a Xenon Arc Apparatus.
- i. ASTM D 696 - Standard Test Method for Coefficient of Linear Thermal Expansion of Plastics Between -30 degrees C and 30 Degrees C with a Vitreous Silica Dilatometer; 2008.
- j. ASTM D 2047 - Standard Test Method for Static Coefficient of Friction of Polish-Coated Floor Surfaces as Measured by the James Machine; 2004.

#### American Wood Protection Association (AWPA):

- a. AWPA E1-09 - Standard Method for Laboratory Evaluation to Determine Resistance to Subterranean Termites.
- b. AWPA E10-11 -Standard Method of Testing Wood Preservatives by Laboratory Soil Block Cultures

*US Green Building Council's Leadership in Energy and Environmental Design Green Building Rating System® (LEED)*

### 1.4 DESIGN / PERFORMANCE REQUIREMENTS

Structural Performance:

- a. Deck: Uniform Load: 100 lbf/sq.ft
- b. Treads of Stairs: Concentrated Load: 750 lbf/sq.ft, and 1/8" max. deflection with a concentrated load of 300 lbf on area of 4 Sq. in
- c. Fire-Test-Response Characteristics per ASTM E84:

1.5 SUBMITTALS

- a. Product Data: Indicate sizes, profile, surface style and performance characteristics.
- b. Samples: For each product specified, one sample, minimum size of 3.5" inches long, representing actual product, color, and finish.

1.6 DELIVERY, STORAGE, AND HANDLING

Storage and Handling:

1. Never dump dassoXTR materials when unloading
2. Store on a flat surface and cover with non-translucent material
3. When carrying dassoXTR planks, carry on edge for better support
4. Refer to installation instructions for additional guidelines on each product

1.7 WARRANTY

- a. Warranty: Limited Warranty against rot, decay and termites damage for a period of 20 years beginning from the date of purchase under normal conditions of the use and exposure.

1.8 QUALITY ASSURANCE

- a. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum ten years of code compliant products for 10 years.
- b. Material Disclosures Required: Health Product Declaration - MSDS sheets requires with submittal package.
- c. Installer Qualifications: Minimum 2 years experience installing similar products.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

Contract Documents are basis of design, products by:

Manufacturer: Dasso Group  
Address: 6060 Boat Rock Blvd SW, Atlanta, GA 30336  
Tel: +1-404-691-6872  
eMail: info@dassoXTR.com  
website: dassoXTR.com

Species: Moso Bamboo (*Phyllostachys pubescens*)  
Substitutions: Not permitted.

Any requests for substitutions will be considered in accordance with provisions of Section 01 60 00, 2 weeks prior to project bidding.

## 2.2 APPLICATIONS/SCOPE

Fused Bamboo Materials:

Material Description: Stranded Reconstructed Bamboo Plank consist of 87% thermalized bamboo fiber and 13% Phenolic Resin, fused together under high temperature and heat with the following physical properties:

- a. XTR-DK20-G2-PP: 1x6 dassoXTR Fused Bamboo Two Edge Grooved Planks with End-Matched Tongue and Groove Pre-primed with Natural Oil
- b. XTR-DK20-G1-PP: 1x6 dassoXTR Fused Bamboo One Edge Grooved Planks with End-Matched Tongue and Groove Pre-primed with Natural Oil
- c. XTR-LUM20-205: dassoXTR Fused Bamboo Lumber rough sawn unfinished intended for banding around the decking
- d. Optional Item: XTR-LUM40-152: dassoXTR Fused Bamboo Lumber rough sawn unfinished intended for use as hand railing. (the top cap for railing)
- e. Specific Gravity: 1.1 g/cu cm. When tested accordance with ASTM D-792
- f. Flexural Properties when tested in accordance with ASTM D6109:
  1. Modulus of Rupture (MOR): 20,100 psi
  2. Modulus of Elasticity (MOE): 2,103,000 psi
- g. Direct Screw Withdrawal Force when tested in accordance with ASTM D-1761: 511 lbf
- h. Slip Resistance when tested in accordance with ASTM F-1679:
  1. Reeded / Ridged Side
    - a) Dry - 0.64

b) Wet - 0.42

2. Smooth Side

- a) Dry - 0.64
- b) Wet - 0.47

- i. Termites Resistance AWWA E1-09: Rating 8
- j. Decay Resistance AWWA E10-12: Class A
- k. Hardness when tested in accordance with ASTM D-143: 3,820 lb
- l. Water Absorption with tested in accordance with ASTM D-1037: %vol.<1.35%, %mass<1.29%
- m. Flame Spread Index when tested in accordance With ASTM E-84: Class A (10)
- n. Smoke Development when tested in accordance with ASTM E-84: Class A (40)
- o. Flame Spread Rating CAN/ULC S102-10: 20
- p. Smoke Developed Classification CAN/ULC S102-10: 25
- q. Spread of Flame Test CAN/ULC-S107-10: Class A
- r. Intermittent Flames Exposure Test CAN/ULC-S107-10: Class A

2.3 LEED INFORMATION:

Under the LEED version 2009, the use of dassoXTR Fused Bamboo products may contribute following credits for the most applicable rating system – Building Design & Construction (BD+C):

- a. MR Credit 6 – Rapid Renewable Materials
- b. MR Credit 7 – Certified Wood (FSC Certified Product)
- c. IEQ Credit 4.3 – Low Emitting Materials: Flooring System (applies to Porch Flooring)
- d. IEQ Credit 4.4 – Low Emitting Materials: Composite Wood (applies to all Fused Bamboo)

Under the LEED version 4, the use of dassoXTR Fused Bamboo products may contribute following credits for the most applicable rating system – Building Design & Construction (BD+C):

- a) MR Credit 1 – Building Life Cycle Impact Reduction
- b) MR Credit 2 – Building Product Disclosure and Optimization – Environmental Product Declaration
- c) MR Credit 3 – Building Product Disclosure and Optimization – Sourcing of Raw Materials (FSC Certified Product)
- d) IEQ Credit 2 – Low Emitting Materials

2.4 ACCESSORIES

Fasteners:

- a. Starter board, ending plank and stair steps should be hold down with Screw #8 at every joist with exception of when there is a joint on top of the joist. Starter board

should be pre-drill, countersink with suitable drill bit and hold down with Eisen D-plug System (#8 start head screw x 2-1/2" and Fused Bamboo Plugs)

- b. Concealed Fastener: Tigerclaw TC-120 with #6 screw x 1-3/4" provided with the package or equivalent of Eisen Hidden Fasteners.

## 2.5 FINISH

- a. See company website for finishes and cleaning. Per manufacturers requirements to maintain warranties.

<https://dassoxt.com/Products/Finishes,SealersandCleaners.aspx?pgId=582>

## PART 3 - EXECUTION

### 3.1 EXECUTION

#### Examination

- a. Install according to manufactures instructions.
- b. Installer Qualifications: Minimum 2 year experience installing similar products.
- c. Cut, drill and rout using carbide tipped blades.
- d. Pre-drill holes suitable for designated screw and plug.
- e. Cut ends square.

### 3.2 CLEANING

- a. Clean surfaces regularly with recommended cleaner from Woca, Penofin or Messmers, depending on which coating materials were used to recoat your decking.
- b. Power wash with "fan tipped" nozzle in the direction of the grain of the planks with a maximum pressure of 1500 psi.
- c. Provide owner three copies of cleaning and maintenance instructions.

### 3.3 PROTECTION

- a. Protect products until project is complete.
- b. Touch-up or repair as needed before substantial completion.

END OF SECTION