

## Architectural Specification USF CONTRACT Avignon Collection

CSI SECTION 09 64 33

### PART ONE- GENERAL

#### 1.01 QUALITY ASSURANCE

##### A. Qualifications:

###### 1. Manufacturer Qualifications:

- a. Use low-VOC and EØ compliant adhesives and finishes in manufacturing of all products.
- b. Minimum five years experience in manufacturing and distributing bamboo flooring of the type specified.
- c. Member: National Wood Flooring Association, United States Green Building Council

###### 2. Installer Qualifications:

- a. Minimum three years experience in hardwood flooring installation.
- b. Minimum three years experience in installation of hardwood flooring over radiant heating systems.

#### 1.02 DELIVERY, STORAGE, AND HANDLING

- ##### A. Deliver flooring to project site in original boxes no less than 72 hours prior to start of installation open cartons to acclimate.

#### 1.03 PROJECT/SITE CONDITIONS

- ##### A. Environmental Requirements: Installation spaces, flooring and adhesive must be maintained at normal occupancy temperature and humidity levels (HVAC working) for minimum 3 days prior to installation. Installation contractor must test for moisture, as referenced in the installation guidelines, ensuring that moisture content of product relative to subfloor is sufficient for installation (less than 3% moisture content difference between the material and the subfloor installed).

#### 1.04 WARRANTY

- ##### A. Lifetime Structural Warranty: USFloors bamboo flooring warrants to the original purchaser to be free from defects in manufacturing for the useable lifetime of the product. This covers the bonding agent process that includes the separation of the bamboo-to-bamboo construction that each bamboo board incorporates. In the event of a defect, USFloors will arrange for a credit based on the original purchase of the product.

### PART TWO- PRODUCT

#### 2.01 MANUFACTURER

USFloors Inc.  
3580 Corporate Drive  
Dalton, GA 30721 USA  
800.404.2675 X28  
[www.USFloorsllc.com](http://www.USFloorsllc.com)

#### 2.02 MATERIALS

##### A. Acceptable Product: USF CONTRACT Avignon Provencal

1. Species: FSC certified European White Oak engineered veneer
2. Hand Scraped
3. Size: 7 ½" x 72" x 13/16"
4. Edge: Tongue and groove with micro-bevel edge channeled backing
5. Finish: Organic Natural Oil
6. Physical Property Performance Requirements:
  - a. Hardness: ASTM D 1037, Janka Ball
  - b. Flammability: ASTM E 648: Class I Interior Floor Finish
  - c. NFPA 255: Passes "life Safety Codes"
  - d. Smoke Density: ASTM E 622
  - e. Compressive Strength: ASTM D 3501
  - f. Slip Resistance: ASTM D 2394 Friction Coefficient
  - g. Abrasion Resistance: ASTM D1037
  - h. Moisture Content: ASTM D 4442 (varies based on distribution point)

- i. Formaldehyde Emissions: CARB Compliant - <E0 standards
  - j. Lacey Act Compliance
- Substitutions: None Permitted

B. Acceptable Product: USF CONTRACT Avignon Mistral

1. Species: FSC certified European White Oak engineered veneer
2. Wire Brushed
3. Size: 7 ½" x 72" x 13/16"
4. Edge: Tongue and groove – square edge
5. Finish: Organic Natural Oil
6. Physical Property Performance Requirements:
  - a. Hardness: ASTM D 1037, Janka Ball
  - b. Flammability: ASTM E 648: Class I Interior Floor Finish
  - c. NFPA 255: Passes "life Safety Codes"
  - d. Smoke Density: ASTM E 622
  - e. Compressive Strength: ASTM D 3501
  - f. Slip Resistance: ASTM D 2394 Friction Coefficient
  - g. Abrasion Resistance: ASTM D1037
  - h. Moisture Content: ASTM D 4442 (varies based on distribution point)
  - i. Formaldehyde Emissions: CARB Compliant - <E0 standards
  - j. Lacey Act Compliance

Substitutions: None Permitted

C. Acceptable Product: USF CONTRACT Avignon Cavari

1. Species: FSC certified European White Oak engineered veneer
2. Clear Visual
3. Size: 7 ½" x 72" x 13/16"
4. Edge: Tongue and groove -square edge
5. Finish: Organic Natural Oil
6. Physical Property Performance Requirements:
  - a. Hardness: ASTM D 1037, Janka Ball
  - b. Flammability: ASTM E 648: Class I Interior Floor Finish
  - c. NFPA 255: Passes "life Safety Codes"
  - d. Smoke Density: ASTM E 622
  - e. Compressive Strength: ASTM D 3501
  - f. Slip Resistance: ASTM D 2394 Friction Coefficient
  - g. Abrasion Resistance: ASTM D1037
  - h. Moisture Content: ASTM D 4442 (varies based on distribution point)
  - i. Formaldehyde Emissions: CARB Compliant - <E0 standards
  - j. Lacey Act Compliance

Substitutions: None Permitted

D. Acceptable Product USF CONTRACT Avignon Palais

1. Species: FSC certified European White Oak engineered veneer
2. Rustic Visual
3. Size: 7 ½" x 72" x 13/16"
4. Edge: Tongue and groove – square edge
5. Finish: Organic Natural Oil
6. Physical Property Performance Requirements:
  - a. Hardness: ASTM D 1037, Janka Ball
  - b. Flammability: ASTM E 648: Class I Interior Floor Finish
  - c. NFPA 255: Passes "life Safety Codes"
  - d. Smoke Density: ASTM E 622
  - e. Compressive Strength: ASTM D 3501
  - f. Slip Resistance: ASTM D 2394 Friction Coefficient
  - g. Abrasion Resistance: ASTM D1037

- h. Moisture Content: ASTM D 4442 (varies based on distribution point)
  - i. Formaldehyde Emissions: CARB Compliant - <E0 standards
  - j. Lacey Act Compliance
- Substitutions: None Permitted

- E. Acceptable Product: USF CONTRACT Avignon Corsica
- 1. Species: FSC certified European White Oak engineered veneer
  - 2. Wide Plank Clean Visual
  - 3. Size: 10 ¼" x 86 5/8" x 13/16"
  - 4. Edge: Tongue and groove – square edge
  - 5. Finish: Organic Natural Oil
  - 6. Physical Property Performance Requirements:
    - a. Hardness: ASTM D 1037, Janka Ball
    - b. Flammability: ASTM E 648: Class I Interior Floor Finish
    - c. NFPA 255: Passes "life Safety Codes"
    - d. Smoke Density: ASTM E 622
    - e. Compressive Strength: ASTM D 3501
    - f. Slip Resistance: ASTM D 2394 Friction Coefficient
    - g. Abrasion Resistance: ASTM D1037
    - h. Moisture Content: ASTM D 4442 (varies based on distribution point)
    - i. Formaldehyde Emissions: CARB Compliant - <E0 standards
    - j. Lacey Act Compliance
- Substitutions: None Permitted

- F. Acceptable Product: USF CONTRACT Avignon Grenoble
- 1. Species: FSC certified European White Oak engineered veneer
  - 2. Wide Plank Rustic Visual
  - 3. Size: 10 ¼" x 86 5/8" x 13/16"
  - 4. Edge: Tongue and groove – square edge
  - 5. Finish: Organic Natural Oil
  - 6. Physical Property Performance Requirements:
    - a. Hardness: ASTM D 1037, Janka Ball
    - b. Flammability: ASTM E 648: Class I Interior Floor Finish
    - c. NFPA 255: Passes "life Safety Codes"
    - d. Smoke Density: ASTM E 622
    - e. Compressive Strength: ASTM D 3501
    - f. Slip Resistance: ASTM D 2394 Friction Coefficient
    - g. Abrasion Resistance: ASTM D1037
    - h. Moisture Content: ASTM D 4442 (varies based on distribution point)
    - i. Formaldehyde Emissions: CARB Compliant - <E0 standards
    - j. Lacey Act Compliance
- Substitutions: None Permitted

## **PART 3- EXECUTION**

### **3.01 EXAMINATION**

- A. Examine substrates prior to installation
- B. Verify that subfloor is clean, dry, and free of contaminants that would interfere with adhesive bond.
- C. Concrete installation:
  - 1. Test concrete floors for moisture content using a Calcium Chloride test or Tramex Moisture Encounter meter.
  - 2. Do not install flooring if vapor pressure exceeds 3 lbs per 1,000 sf (15 g per m<sup>2</sup>) in 24 hours, as under these conditions "urethane" adhesives tend to fail.
  - 3. In multiple story buildings, test each floor level
  - 4. Mark test location(s) on As-Built Drawings
- D. The subfloor moisture content is not to exceed 14% for plywood substrate.

1. In multiple story buildings, test each floor level
  2. Mark test location(s) on As-Built Drawings.
- E. Verify that HVAC system is operating and maintaining occupancy level temperature and humidity conditions.
- F. If either of the above requires attendance, coordinate with responsible entity to correct unsatisfactory conditions.

### **3.02 PREPARATION**

- A. Acclimatization:
1. Open all bundles, and let acclimate for a minimum of 72 hours.
  2. Fix the substrate to ensure bumps and depressions are less than 1/8" over 10 feet.

### **3.03 INSTALLATION**

- A. Install in accordance with manufacturer's installation instructions by either:
1. nailing or stapling to substrate
  2. gluing to substrate
  3. nailing or stapling and gluing to substrate
  4. gluing t/g with cork underlayment
  5. Lay flooring in the direction(s)/pattern(s) as shown on Drawings.
  6. Inquire for Natural Bamboo® Installation Guidelines.
  7. Accessories: Install using methods appropriate to the accessory and flooring system.

### **3.04 CLEANING**

- A. Clean in accordance to Manufacturer's Maintenance Recommendations. Inquire for Natural Bamboo® maintenance guidelines.

### **3.05 PROTECTION**

- A. Remove visible adhesive and other surface blemishes using cleaner as recommended.
- B. Do not wash floor for at least five days following installation
- C. When the planks sufficiently seats (in no case less than five days), clean in accordance with USFloors written directions.
- D. After cleaning the flooring surface, it is necessary to protect the floor from mars, indentations, paint drippings, or other damage by either using building paper or by keeping traffic off the floors until the building is ready for occupancy.
- E. Do not use non-breathable sheet or film that could cause condensation to form. Maintain covering throughout remainder of construction period
- F. Should the floors become dirty or damaged prior to final acceptance by the Owner, they shall be repaired, re-cleaned, refinished, or replaced as required so that the Owner will receive floors ready for occupancy without additional cleaning before using.

### **3.06 OPERATIONS AND MAINTENANCE DOCUMENTS**

- A. Upon completion of floor installation the owner, attendants or individuals in charge responsible for upkeep of building are to follow care and maintenance instructions. Wait 48 hours after completion of installation and application of any finish before beginning maintenance program. Use finish manufacturer's maintenance instructions for bamboo floors, which have finish applied on site. Use USFloors maintenance instructions for prefinished bamboo floors that do not have extra finish applied on site.
- B. The General Contractor shall supply original copies of all flooring cleaning and maintenance information provided by USFloors. The Owner's maintenance personnel must receive this information upon completion of work.