

CSI Spec. for HighTech Woods™ Flooring (09640)

Prefinished HighTech Woods™ Flooring

PART 1 – GENERAL INFO

1.03 QUALITY ASSURANCE

A. Qualifications:

1. Manufacturer Qualifications:

- a. Use of low-VOC and E1 Compliant adhesives and finishes in manufacturing of all products.
- b. Manufacturer must have legal right to the patented process and glues used in the production of specified HighTech Woods™ flooring products.

2. Installer Qualifications:

- a. Minimum three years experience in hardwood flooring installation.
- b. Installer must be a member of the National Wood Flooring Association.

• 1.04 DELIVERY, STORAGE, AND HANDLING

A. Deliver flooring to project site in original boxes not less than 10 days prior to start of installation.

1.05 PROJECT/SITE CONDITIONS

A. Environmental Requirements: Installation spaces, flooring and adhesive (if used) must be maintained at normal occupancy temperature and humidity levels for minimum 10 days prior to installation. Hardwood flooring functions best when the room temperature ranges from 60-70 Fahrenheit, and the room relative humidity stays between 40-60%. **Important Note:** Room temperatures must remain between 50-80 Fahrenheit, and room relative humidity must remain between 35-65% both prior to installation and year-round, or warranty will be voided. A humidifier or dehumidifier may be needed to remedy these conditions, which not only will ensure a healthy Strandwoven® floor, but also help ensure a healthy indoor air quality. **Note:** In extremely dry climates, care should be taken to avoid shrinkage by allowing flooring to acclimate under actual use conditions. Remove the planks from the box and expose to local conditions for several days, as required under installation guidelines.

1.06 WARRANTY

A. Special Warranty:

1. HighTech Woods™ Structural Warranty: Lifetime warranty against delamination or separation as a result of a manufacturing defect when installed and maintained in accordance with manufacturer's installation instructions.

PART 2 – PRODUCTS

2.01 MANUFACTURER/DISTRIBUTOR

A. Sustainable Materials
5403 Western Ave, Unit C
Boulder, CO 80301

Tel: (720) 449-3063
e-mail: info@sustainablematerials.com
Website: <http://www.sustainablematerials.com>

B. HighTech Woods™ Plank Flooring:

1. Color

- a. HighTech Woods™ - Chestnut Oak
- b. HighTech Woods™ - Country Ash
- c. HighTech Woods™ - Field Ash
- d. HighTech Woods™ - Light Weathered
- e. HighTech Woods™ - Medium Weathered
- f. HighTech Woods™ - Oak Latte
- g. HighTech Woods™ - Oak Natural
- h. HighTech Woods™ - Smoked Walnut
- i. HighTech Woods™ - Tobacco Oak
- j. HighTech Woods™ - Walnut Natural

* Slight color variations are expected, and are considered normal within the manufacturing operations. Please inquire as to the availability of further differentiated color shades.

C. Substitutions: None Permitted.

2.02 MATERIALS

A. HighTech Woods™ Flooring:

1. Species: Ash, Oak or Walnut

2. Sizes:

- a. **CLASSIC:** 11mm x 151mm x 2000mm (approx. 2/5" thick x 5.9" wide x 78.7" long).
- b. **WIDE:** 11.2mm x 206mm x 2200mm (approx. 11/25" thick x 8-1/4" wide x 87" long).
- c. **MASSIVE:** 11.2mm x 271mm x 2378mm (approx. 11/25" thick x 10-3/4" wide x 93-9/16" long).

* Other widths, thickness, and lengths are available upon special order.

3. Edge: Valinge 5G Click Lock

4. Back: Birch Plywood

5. Finish: UV Cured Acrylic

6. Physical Property Performance Requirements:

- a. Brinell Hardness (EN 1534): 10 HB (avg.)
- b. Flammability (ASTM E648): Class I – 0.82 W / cm²

- c. Tensile Strength (ASTM D 3500): Minimum 14,570 psi (103.1 MPa) parallel to grain.
- d. Slip Resistance (ANSI A137.1 / A326.3): COF when wet: 0.73
- e. Taber Abrasion Resistance (ASTM D4060): 5% Class 34 (<8%) - (CS-10 abrasive wheels)
- f. Formaldehyde Emissions (EN 717-1): E1 Compliant
- g. Impact Isolation Class (ASTM E492/ E989): IIC OF 55
- h. Sound Transmission Coefficient (ASTM E336/E4134): 55 STC on 8" slab only
- i. Carb Phase 2 Compliant (ASTM D6007-14): YES
- j. Thermal Conductivity (ASTM C518): 1.2472 Vlu in./ h ft² F
- k. Thermal Resistance (EN 12664/12667): R0.07 (m²xK)/W

2.03 ACCESSORIES

- A. Stair Nose (Standard): 77" x ½". Specify color.
- B. Stair Nose (Lap): 77" x ½". Specify color.
- C. Reducer (Standard): 77" x ½". Specify color.
- D. Reducer (Lap): 77" x ½". Specify color.
- E. Threshold: 77" x ½". Specify color.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine substrates upon which flooring will be installed.
 - 1. Verify that subfloor is clean, dry, and free of contaminates that would interfere with adhesive bond.
 - 2. If installing on concrete: Test concrete floors for moisture content using a Calcium Chloride test or Tramex Moisture Encounter meter. Assess readings to ensure the Vapor Diffusion Retarder used during the installation is sufficient based on the site conditions.
 - a. In multiple story buildings, test each floor level where flooring will be installed.
 - b. Mark test location(s) on As-Built Drawings.
 - 3. If installing on Wooden Sub-floor, note whether there is an existing Vapor Diffusion Retarder attached to the underside(s) of the joists (as this would be a determining factor if one should be installed beneath the HighTech Woods™ flooring being installed).
 - a. In multiple story buildings, test each floor level where HighTech Woods™ flooring will be installed.
 - b. Mark test location(s) on As-Built Drawings.
- B. Verify that HVAC system is operating and maintaining occupancy level temperature and humidity conditions.

C. If either of the above requires attendance, coordinate with responsible entity to correct unsatisfactory conditions.

3.02 PREPARATION

A. Acclimatization: Acclimate unopened boxes in a dry, well-ventilated area on the jobsite for a minimum of 48 hours.

B. Maintain a room temperature of at least 64°F (18°C) and relative air humidity (RH) range between 35-65% during storage and installation.

C. Fix the substrate to ensure bumps and depressions are less than 1/6" over 6 feet.

D. Use a Vapor Diffusion Retarder in most installations (see Installation guidelines for specifics and exclusions)

3.03 INSTALLATION

A. HighTech Woods™ Flooring:

1. Install in accordance with manufacturer's installation instructions via Floating Floor Installation method (glue-down installation can be done in certain conditions – see Installation guidelines for specifics).

2. Lay flooring in the direction(s)/pattern(s) as shown on Drawings.

3. In all areas bigger than 6727 ft² (625 m²) an expansion joint is essential to avoid gaps appearing in the joints due to changes in humidity and temperature.

Inquire for HighTech Woods™ Installation Guidelines.

B. HighTech Woods™ Accessories:

1. Install using methods appropriate to the accessory and flooring system.

2. Calculate proper baseboard thickness relative to room size to ensure expansion space is covered

3.04 CLEANING

A. Clean in accordance with the Manufacturer's recommendations as listed on the Installation Instructions.

3.05 PROTECTION

A. Cover installed flooring with heavy kraft-paper or other suitable covering if other trades will be working in the area. Do not use non-breathable sheet or film that could cause condensation to form. Maintain covering throughout remainder of construction period.

With any questions, or for this in a digital format, contact:

Sustainable Materials, Inc.
5403 Western Ave, Unit C
Boulder, CO 80301
Ph: (720) 449-3063
Email: info@sustainablematerials.com
Web: www.sustainablematerials.com