

CSI Spec. for GYMBOO™ Sport flooring (09640)

UNFINISHED SOLID STRIP BAMBOO FLOORING FOR GYM AND RECREATIONAL PURPOSES

PART 1 – GENERAL INFO

1.03 QUALITY ASSURANCE

A. Qualifications:

1. Manufacturer Qualifications:

- a. Use of low-VOC and E0 Compliant adhesives and finishes in manufacturing of all products.
- b. Minimum five years experience in manufacturing of bamboo flooring.
- c. Member: National Wood Flooring Association, United States Green Building Council

2. Installer Qualifications:

- a. Minimum three years experience in hardwood flooring installation in gym and recreational installations.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Deliver flooring to project site in original boxes not less than 5 days prior to start of installation.

1.05 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 to be installed, and the subfloor to which it is being installed). This is very important.

1.06 WARRANTY

A. Special Warranty:

Sustainable Materials' Structural Warranty: 10 years 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 #C
Boulder, CO 80301

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

B. Bamboo Flooring Strip Type:

1. Lamination: a. Vertical Grain - Bamboo strips laminated together with edges exposed to the wear surface to form a solid bamboo plank without internal voids.

2. Color: GYMBOO Light

C. Substitutions: None Permitted.

2.02 MATERIALS

A. Bamboo Flooring:

1. Brand: GYMBOO™ Sport
2. Species: Mao Tsu (Hairy Bamboo).
3. Size: 2-1/4" wide by 3/4" inch thick by 75" length
4. Edge: Square-edge, with tongue and groove on four sides (ie: end-matched).
5. Back: Channeled.
6. Color: GYMBOO™ Light or GYMBOO™ Dark
7. Chemical Treatment: Natural borate solution and hydrogen peroxide to eliminate pests and mildew
8. Physical Property Performance Requirements:
 - a. Hardness: ASTM D 1037, Janka Ball: 1798 lbs
 - b. Dimensional Stability: ASTM D 1037-99: Dimensional change coefficient: 0.00144.
 - c. Flammability: ASTM E 648: Class I Interior Floor Finish rating per NFPA 101.
 - d. Smoke Density: ASTM E 622: Maximum 270 in flaming mode; 330 in non-flaming mode.
 - e. Compressive Strength: ASTM D 3501: Minimum 7,600 psi (52 MPa) parallel to grain; 2,624 psi (18 MPa) perpendicular to grain.
 - f. Tensile Strength: ASTM D 3500: Minimum 15,300 psi (105 MPa) parallel to grain.
 - g. Formaldehyde Emissions: ASTM E 1333: 0.0127 ppm avg. Phenol (No Urea Formaldehyde inclusion acceptable).

B. Shock-absorptive Underlayment/substrate system:

1. Vapor barrier: 6mil plastic or equivalent
2. Shock Absorptive Rubber Pads:
 - a. GYMBOO Pad Pro (for general recreation)
 1. Material: 100% recycled rubber
 2. Dimension: 10mm x 55mm x 73mm (approx. 3/8"x2-1/8"x2-7/8")
 3. Profile: Trapezoidal waffle
 - b. GYMBOO Pad Elite (for high performance systems)
 1. Material: molded rubber
 2. Dimension: 19mm x 65mm diameter (approx. 3/4"x2-9/16")
 3. Profile: Conical Elastomer "TPR" Rubber with telescopic cushioning
3. Substrate: Qty 2 layers of 1/2" cdx plywood.

C. Accessories:

1. Fasteners: 2 inch barbed flooring cleats, 7d or 8d galvanized flooring nail, or 2 inch 15-gauge staples with 1/2 inch crowns.

D. Finish System:

1. Bona Sportive Finish; Contact Bona Kemi: (800) 872-5515, or at www.bona.com; Direct link to product information: http://www.bona.com/upload/product%20description/Sportive_Finish_Description.pdf.

[or] suitable alternative

Note: Oil-based urethanes have a tendency to "yellow" over time.

2. Bona Sportive Paint (court demarcation lines); Contact Bona Kemi: (800) 872-5515, www.bona.com; Direct link to product information: http://www.bona.com/upload/product%20description/Sportive_Paint_Description.pdf.

[or] suitable alternative

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 contaminants that would interfere with adhesive bond.

2. Contractor must ensure that the concrete slab is smooth and flat, and not to exceed a level tolerance greater than 1/8" over 10 feet in all directions. Further, the slab must be protected from the ground and wall in all directions by an acceptable vapor barrier to prohibit moisture transfer to the flooring assembly. If installing on concrete: Test concrete floors for moisture content using a Calcium Chloride test or Tramex Moisture Encounter meter. Do not install flooring if vapor pressure exceeds 3 lbs per 1,000 sf (15 g per m²) in 24 hours.

a. 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 need attendance, coordinate with responsible entity to correct unsatisfactory conditions.

3.02 PREPARATION

A. Acclimatization: Open all bundles, and let acclimate for a minimum of 5 days. Ensure plywood used in the system is also dried to the site conditions.

B. Fix the substrate to ensure bumps and depressions are less than 1/8" over 10 feet.

3.03 INSTALLATION

A. GYMBOO Sport Flooring System:

1. Install 6 mil. vapor barrier, overlapped 6" at seams, and taped.
2. Install "shock-absorbing" pads to the underside of a layer of 1/2" APA certified exterior grade plywood, 12" on center in all directions (ie: 28 pads per sheet of plywood), and lay the plywood on the slab.
3. Install identical layer of plywood (without the pads) on top of first layer, but at 45 degrees to the first sheet. Fasten the two layers together.
4. Install the flooring with a pneumatic nailer/stapler, in the direction(s)/pattern(s) as shown on Drawings.
 - a. Install washer space joints to allow for intermediary expansion between the boards (distance between washer rows are dependent upon local humidity ranges – consult installer for guidance).
 - b. Leave 2" horizontal spacing around each vertical obstruction, and along every wall.

For detailed instructions, contact Sustainable Materials: (720) 449-3063, or www.sustainablematerials.com.

B. Sanding:

1. Sand mechanically and subsequently with Coarse, Medium, and Fine grit paper to an even and uniform surface.
2. Vacuum and "tack" floor surface prior to finish application.

C. Finish application:

1. Inspect installed and sanded flooring surface to ensure surface is suitable for finish application.
2. Apply selected finish in accordance with finish manufacturer's installation guidelines, applying "game lines" when applicable for the selected system.
3. Bona Kemi: (800) 872-5515, or at www.bona.com. Direct link to site prep: http://www.bona.com/upload/Sitework/Sportive_Finish_Sitework.pdf.

D. Installing Moldings:

1. Anchor vent cove molding to wall in accordance with manufacturer's installation guidelines.
2. Miter joints and all inside corners to 45 degrees.
3. Use pre-molded exterior outside corners where applicable.
4. Install all other applicable molding pieces (reducers, etc.) directly to concrete with accepted MFMA guidelines.

3.04 CLEANING

A. Clean in accordance to finish Manufacturer's Maintenance Recommendations

3.05 PROTECTION

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

PART 4 – WARRANTY

See 'GYMBOO™ Sport Warranty' for full description, exclusions, and disclaimer.

Sustainable Materials (herein referred to as the manufacturer) warrants that the commercial flooring sold under this Warranty is, at the time of sale, free of defects in material and manufacture, and that it adheres to Sustainable Materials' strict specifications for the flooring model. Sustainable Materials further warrants that when professionally installed and maintained (both in accordance with Sustainable Materials instructions) and used for its' intended purpose, Sustainable Materials' GYMBOO will not delaminate or separate as a result of a manufacturing defect for a period of ten (10) years from the date of sale (herein considered "Sustainable Materials Warranty Period").

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

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