

**SECTION 09624 – AREA ELASTIC SYNTHETIC ATHLETIC FLOORING****PART 1 - GENERAL****1.1 DESCRIPTION**

- A. Scope
  - 1. The complete installation of synthetic sports surfacing system including striping.
- B. Related work specified under other sections.
  - 1. CONCRETE MOISTURE VAPOR EMISSION AND pH TESTING - SECTION 01450
    - a. Moisture vapor emission and pH of concrete shall be tested. Moisture vapor emissions must not exceed 3lbs/1,000ft<sup>2</sup> per 24 hours as verified using Calcium Chloride test ASTM F 1869-04. pH level should be in the range of 7 to 8.5.
  - 2. CONCRETE SUBFLOORS - SECTION 03\_\_ \_\_
    - a. The general contractor shall furnish and install the concrete subfloors, depressing the slab sufficiently to accommodate the floor system.
    - b. The slab shall be steel troweled and finished smooth to a tolerance of 1/8" in any 10' radius. Floor Flatness and Floor Levelness (FF and FL) numbers are not recognized. High spots shall be ground level and low spots filled with approved leveling compound.
    - c. **No concrete curing, hardening or sealing agents shall be applied or mixed with the concrete subfloor.**
  - 3. MEMBRANE WATERPROOFING - SECTION 07\_\_ \_\_
    - a. Concrete subfloors on or below grade shall be installed over a suitable moisture retardant membrane. Water vapor membrane shall comply with ASTM E 1745-97 (2004).
  - 4. GAME STANDARD INSERTS - SECTION 11\_\_ \_\_

**1.2 REFERENCES**

- A. ASTM (American Society for Testing & Materials)
  - 1. ASTM D 2240-04
  - 2. ASTM E 1745-97 (2004)
  - 3. ASTM F 1869-04

**1.3 SUBMITTALS**

- A. Connor Sports Flooring ElastiWood™ specifications.
- B. One sample of the specified system, if requested by Architect.
- C. Connor Sports Flooring Synthetic Care & Maintenance Guide.
- D. Current installation instructions as published by Connor Sports Flooring.

**1.4 QUALITY ASSURANCE**

- A. MATERIAL SUPPLIER: Shall be Connor Sports Flooring.
- B. INSTALLER:
  - 1. The complete installation of the flooring system, as described in these specifications, shall be carried out by an experienced installer (Flooring Contractor), and the work shall be performed in accordance with current Connor Sports Flooring installation instructions.
  - 2. Installer (Flooring Contractor) shall be liable for all matters related to the installation for a period of one year after the floor has been installed and completed.

**1.5 DELIVERY, STORAGE AND HANDLING**

- A. Materials must be delivered in Connor Sports Flooring's original, unopened and undamaged packaging with identification labels intact.
- B. Store the material protected from exposure to harmful weather conditions on a clean, dry, flat surface protected from possible damage. **Do not stack rolls of material.**
- C. Storage conditions shall be 60°F to 85°F.

**1.6 SITE CONDITIONS**

- A. Installation of synthetic materials shall not commence until all other finishes and overhead mechanical trades have completed their work in the synthetic floor areas.
- B. Permanent heat, light and ventilation shall be installed and operating during and after installation. Subfloors shall be clean, dry and free from dirt, dust, oil, grease, paint, old adhesive residue, or other foreign materials.

- C. Moderate room temperature of 65° F to 80° F shall be maintained for one week prior to, during and 72 hours after installation.
- D. Flooring installation shall not begin until moisture vapor emissions, pH level, and levelness of concrete subfloors have been met. The installation area shall be closed to all traffic and activity for a period to be set by the flooring contractor.
- E. Environmental Limitations
  - 1. Comply with Connor Sports Flooring's requirements.
  - 2. Adhere to all MSDS requirements for materials employed in the work. Protect all persons from exposure to hazardous materials at all times.
- F. After the synthetic floors are installed and the game lines are painted, the area is to be closed to allow curing time for the system. No other trades or personnel are allowed on the floor until the owner has accepted it.

## 1.7 WARRANTY

- A. Connor Sports Flooring warrants that the ElastiWood materials it has supplied will be free from manufacturing defects for a period of ten (10) years.

The foregoing warranty is in lieu of and excludes all other warranties not expressly set forth herein, whether express or implied in operation of law or otherwise, including, but not limited to, any implied warranties of merchantability or fitness. This warranty is expressly limited to the flooring materials (goods) supplied by Connor Sports Flooring. This warranty does not cover floor damage caused (wholly or in part) by fire, winds, floods, moisture migration from any source, other unfavorable atmospheric conditions or chemical action, nor does it apply to damage caused by ordinary wear, misuse, abuse, negligent or intentional misconduct, aging, faulty building construction, concrete slab separation, faulty or unsuitable subsurface or site preparation, settlement of the building walls or faulty or unprofessional installation of Connor Sports Flooring systems.

- B. Connor Sports Flooring warrants the ElastiWood maple print for a period of thirty-eight (38) years.

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- C. Connor Sports Flooring shall not be liable for incidental or consequential losses, damages or expenses directly or indirectly arising from the sale, handling or use of the materials (goods) or from any other cause relating thereto, and their liability hereunder in any case is expressly limited to the replacement of materials (goods) not complying with this agreement or, at their election, to the repayment of, or crediting buyer with, an amount equal to the purchase price of such materials (goods), whether such claims are for breach of warranty or negligence. Any claim shall be deemed waived by buyer unless submitted to Connor Sports Flooring in writing within 30 days from the date buyer discovered, or should have discovered, any claimed breach.

## **PART 2 - PRODUCTS**

### **2.1 MATERIALS (Connor Sports Flooring ElastiWood™)**

- A. All components shall be non-hazardous, and shall not contain ANY lead, mercury, heavy metals, PCB, or formaldehyde, and shall be supplied by Connor Sports Flooring.
- B. ElastiWood™ Basemat – Specially formulated prefabricated resilient basemat made of recycled rubber and foam granules bound with MDI polyurethane.
  - 1. Basemat thickness – 12mm

2. Basemat optional thickness – 8mm,10mm
- C. ElastiWood™ basemat adhesive – Two-component, thixotropic polyurethane compound.
- D. ElastiWood Area Elastic Performance (AEP) layer – Maple wood print
- E. ElastiWood AEP print adhesive
- E. ElastiWood™ Wear Coat – Three-component, clear, seamless and self-leveling.
  1. Total wear layer thickness – 1.5mm throughout the floor.
- F. ElastiWood™ Clear Top Coat – Four-component polyurethane.
- G. ElastiWood™ Game Line Paint – Three-component polyurethane.
- H. Optional Base (**specify or delete**) – Vinyl wall base 4” high.

### **PART 3 - EXECUTION**

#### **3.1 INSPECTION**

- A. Inspect the concrete slab for proper flatness, dryness and levelness. Report any discrepancies to the general contractor.
- B. Concrete slab shall be broom cleaned by the general contractor.
- C. Installer (Flooring Contractor) shall document all working conditions as specified in PART 1 – GENERAL prior to starting the installation. Report any discrepancies to the general contractor.

#### **3.2 EXAMINATION AND PREPARATION**

- A. Review moisture vapor emission and pH test results as supplied by SECTION 01450.
  1. Moisture vapor emissions must not exceed 3lbs/1,000 ft<sup>2</sup> per 24 hours as verified using Calcium Chloride test ASTM F 1869-04.
  2. pH level should be in the range of 7 to 8.5.
- B. Installation shall not be carried out unless the concrete flatness, moisture vapor emissions, and pH requirements as specified are satisfied.
- C. Prior to installing any product, inspect all goods and notify Connor Sports Flooring immediately of any defects prior to adhering product.

#### **3.3 INSTALLATION**

- A. Prepare concrete to receive flooring material in accordance with installation instructions.
- B. Basemat
  1. Unroll the base mat and allow it to relax overnight or approximately 12 hours or roll basemat directly in to adhesive. **Do not cut the base mat to final dimensions until it is laid into the adhesive.**
  2. Thoroughly mix the two-component polyurethane adhesive per Connor Sports Flooring’s instructions and apply it directly to the concrete subfloor with a V-notched 3/32” X 3/32” X 3/32” trowel.
  3. Install the base mat into the freshly applied adhesive. **Do not allow a compression fit at any seam.** Roll the base mat with a 100 lb segmented roller and repeat the rolling process on the entire mat 45 minutes after installation. Allow the adhesive to cure before proceeding to the AEP layer..
- C. Area Elastic Performance print layer
  1. Unroll flooring and allow flooring to relax.
  2. Apply adhesive directly to concrete with notched trowel per manufacturer’s instructions. Total flooring surface must be fully adhered.
  3. Install flooring into applied adhesive.
  4. Roll sport surface with a medium-size roller to remove entrapped air.
  5. Join side and end seams.
- D. Wear Coat
  1. Thoroughly mix the three-component Clear ElastiWood Wear Coat.
  2. Apply the mixed wear coat material using a notched squeegee or Swedish knife in one layer. The Wear Coat must be applied wet-into-wet to create a seamless surface. Allow the Wear Coat to cure before proceeding to the next application.
- E. Top Coat
  1. Thoroughly mix the four-component Clear ElastiWood Top Coat.

- a. Apply the mixed material with a high-solvent paint roller or T-bar at 250 to 300 square feet per gallon. Allow the Top Coat to cure before applying the game lines.
  - b. Optional application (**Contractor's option**) - Apply the mixed material with an airless sprayer at 225 to 250 square feet per gallon. Allow the Top Coat to cure before applying the game lines.
- F. Game Lines
1. Use only high-quality masking tape approved by Connor Sports Flooring.
  2. Thoroughly mix the three-component game line paint per Connor Sports Flooring instructions.
  3. Provide game lines as indicated on drawings.
- G. Wall Base (**optional**) – Install vinyl base anchored to the walls with base cement.
- H. Remove all excess and waste materials from the work area. Dispose of empty containers in accordance with federal and local statutes.

**END OF SECTION 09624**