

SECTION 09624 - 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 Standards and FinishSECTION 03300
 - a. Concrete slab depression: 14 MM (.551").
 - b. Concrete finish: smooth steel troweled
 - c. Concrete tolerance: 1/8" in any 10' radius. High spots shall be ground level, and low spots filled with approved leveling compound.
 - d. **No concrete curing or hardening agents shall be applied to concrete subfloor.**
 2. Membrane Barrier and Waterproofing.....SECTION 07100
 - a. Concrete subfloors on or below grade shall be adequately waterproofed beneath, at perimeter walls and on earth side of below grade walls. Type and extent of membrane shall be determined by the Project Engineer and installed by the General Contractor.
 3. Thresholds.....SECTION 08700
 4. Game Standard Inserts.....SECTION 11500

1.2 Quality Assurance

A. Manufacturer:

1. Manufacturer shall be an established firm with a minimum of 10 years in business specializing in manufacturing pad and pour urethanes for athletic surfaces.
2. All urethane components shall be manufactured in an ISO 9001 certified plant.

B. Flooring Contractor:

1. The complete installation of the flooring system shall be performed only by an experienced poured urethane flooring contractor and approved by the manufacturer.
2. All work will be performed in accordance with the most recent printed installation instructions of the manufacturer.

1.3 SUBMITTALS

A. Manufacturers Product Information:

1. Submit (3) copies of Connor ElastiPlus SR Athletic System Specification Sheets or as requested.

B. Samples:

1. Submit (1) sample of ElastiPlus SR or as requested.

C. Maintenance Literature:

1. Submit (3) copies of Connors ElastiPlus maintenance instructions.

1.4 WORKING CONDITIONS

- A. Synthetic materials specified herein shall not be installed until all masonry, painting, plaster, tile, marble and terrazzo work is completed, and overhead mechanical trades and painters have finished in the synthetic floor areas. The area will be closed to all trades for duration of the installation and curing period.

1. **The building shall be enclosed, weathertite, with permanent windows and lockable doors.**
2. **Permanent heat, light and ventilation shall be installed and operating prior to, during and after installation.** The general contractor shall provide an area where the stored materials can be maintained at a minimum of 55 degrees and under 50% relative humidity.

3. Subfloors shall be broom clean, dry and free from dirt, dust, oil, grease, **paint**, alkali, concrete curing agents, hardening and parting compounds, old adhesive residue or other foreign materials.
 4. Moderate room temperature of 65 to 80 degrees with a maximum of 70% RH shall be maintained for a week prior to, during and for 72 hours after installation. Any variations shall be approved by approved by the flooring contractor in writing.
- B. **The installation area shall be closed to all traffic and activity during installation and for seven days following to allow drying/curing.**
- C. After completion, area to be kept locked by general contractor. No other trades or personnel to be allowed on floor until accepted by owner.

1.5 WARRANTY

- A. Connor Sports Flooring provides a limited warranty of one (1) year on materials. (A copy of the full warranty, with its Terms and Exclusions, is available from the authorized Connor Dealer.) This warranty is expressly limited to the flooring materials (goods) supplied by Connor. This warranty does not cover floor damage caused (wholly or in part) by fire, winds, flood, other unfavorable atmospheric conditions or chemical action, nor does it apply to damage caused by ordinary wear, misuse, failure to follow Connor ElastiPlus maintenance instructions, abuse, negligent or intentional misconduct, aging, faulty building construction, concrete slab separation or movement, moisture migration either through slab or any other source, faulty or unsuitable subsurface or site preparation, settlement of the building walls or faulty or unprofessional installation of Connor flooring systems.
- B. The foregoing warranty is in lieu of and excludes all other warranties not expressly set forth herein, whether express or implied, including, but not limited to any implied warranties of merchantability or fitness. Connor Sports Flooring and its contractors shall not be liable for incidental or consequential losses, damages or expenses, directly or indirectly arising from the sale, handling or use of the goods, or from any other cause relating thereto, and their liability hereunder in any case is expressly limited to the replacement of 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 goods, whether such claims are for breach of warranty or negligence.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. All polyurethane components shall be supplied by Connor Sports Flooring. All component material shall be non-hazardous and not contain ANY lead, mercury, nor any heavy metals, PCB or formaldehyde.
1. Adhesive:
 - a. ElastiPlus two-component polyurethane.
 2. Basemat:
 - a. 10mm prefabricated high performance rubber mat made of recycled rubber granules bound with MDI polyurethane.
 1. Optional thickness (**specify or delete**) :
 2. 9mm prefabricated high performance rubber mat of recycled rubber granules.
 3. ElastiPlus Ultra-Penetrating Basemat Sealer:
 - a. ElastiPlus two-component, thixotropic polyurethane compound (scratch).
 4. Polyurethane Resin Layer:
 - a. ElastiPlus two-component, pigmented gray (standard), self-leveling, seamless polyurethane urethane.
 - b. 4mm average thickness throughout floor.
 5. Top Coat:
 - a. Three component matte polyurethane finish. Select from standard colors.

6. Game Line Paint:
 - a. ElastiPlus three component waterborne polyurethane coating. Select from standard colors.
7. Optional Base (*specify or delete*):
 - a. Vinyl **or** rubber cove base; 4" high; select from standard colors.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Inspect concrete slab for proper tolerance as described in section 1.01. Report any discrepancies to general contractor.
- B. Flooring contractor shall perform moisture testing of the slab, results will not exceed 3 lbs per 1000 in accordance to ASTM F1869 Anhydrous Calcium Chloride and/or "Determining Relative Humidity in Concrete with In-Situ Probes" not to exceed 75% respecting ASTM F2170. Report results to the general contractor.
- C. Concrete slab shall be broom cleaned without foreign materials by general contractor as described in section 1.04.
- D. All work required to put the concrete slab in an acceptable condition and provide correct working conditions for a successful installation is the responsibility of the General Contractor.
- E. Installation shall not commence until all requirements are completed.

3.2 INSTALLATION

- A. Basemat:
 1. Do not cut basemat to final dimensions until laid into adhesive.
 2. Thoroughly mix two component polyurethane adhesive and apply directly to the concrete subfloor with a notched trowel per manufacturer's instructions.
 3. Install basemat into freshly applied adhesive. Do not allow compression fit at any seams.
 4. Roll basemat with a 75 to 100 pound linoleum roller and repeat the rolling process on the mat 45 minutes after adhering.
- A. Ultra-Penetrating Basemat Sealer 1st Application Coat:
 1. Thoroughly mix two-component mat sealer.
 2. Apply 1st layer of sealer with flat trowel over entire mat surface.
 3. Allow to cure a minimum of 8 to 12 hours before proceeding.
- C. Ultra-Penetrating Basemat Sealer 2nd Application Coat:
 1. Thoroughly mix two-component mat sealer.
 2. Apply 2nd layer of sealer with flat trowel over entire mat surface.
 3. Allow to cure a minimum of 8 to 12 hours before proceeding to next application.
- E. Urethane Resin/Wear Coat:
 1. Thoroughly mix two-component wear coat.
 2. Apply mixed material in two layers at 2mm each using a notched squeegee or Swedish knife. The wear coat must be applied wet-into-wet to create a seamless surface.
 3. Allow the wear coat to cure a minimum of 12 hours.
 4. Inspect and sand imperfections utilizing 120 to 150 grit paper.
- F. Topcoat:
 1. Thoroughly mix three component polyurethane topcoat.
 2. Apply mixed material with high solvent paint roller
 - a. Optional application - Apply mixed material with an airless sprayer.
 3. Allow top coat to cure a minimum of 18 hours before applying game lines.
- G. Game Lines:
 1. Thoroughly mix three-component game line paint following manufacturer's instructions.
 2. Carefully mask and paint game lines as indicated on architectural drawings.
- H. Wall Base (optional) - Install vinyl/rubber base in accordance to suppliers' instructions.

3.03 Cleanup

1. Remove all excess and waste materials from the area of work. Dispose of empty containers in accordance with federal and local statutes.

3.04 Protection

A. Dry/Curing Period:

1. **The installation area shall be closed to all traffic and trades for seven days following installation for drying and curing.**
2. No trades or traffic shall be allowed on surface until acceptance by owners authorized agent.

END OF SECTION 09770

